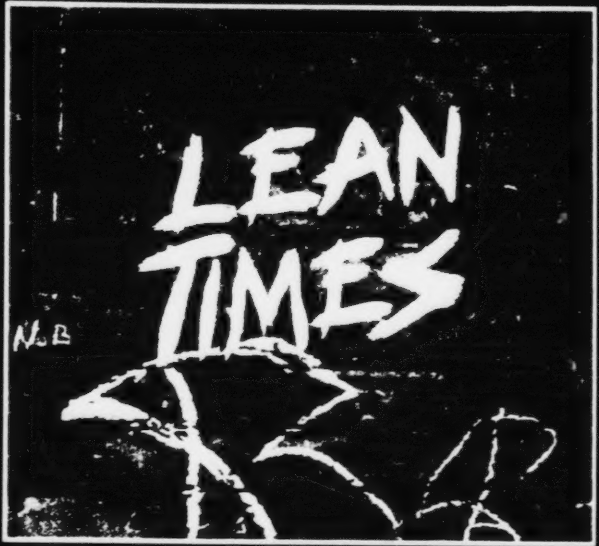
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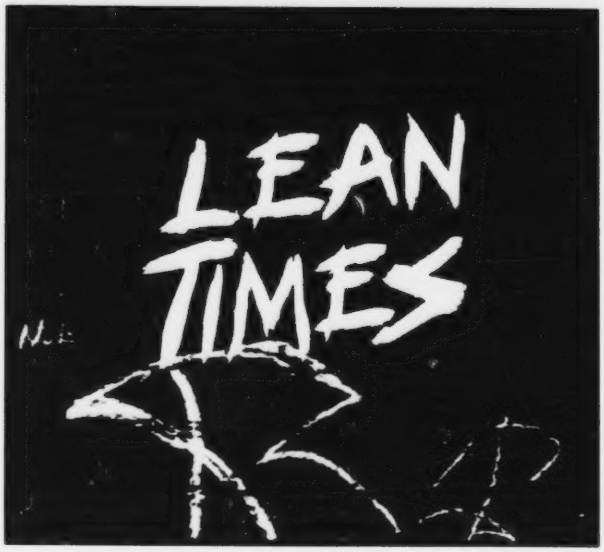
Economic Council of Canada
Nineteenth Annual Review
1982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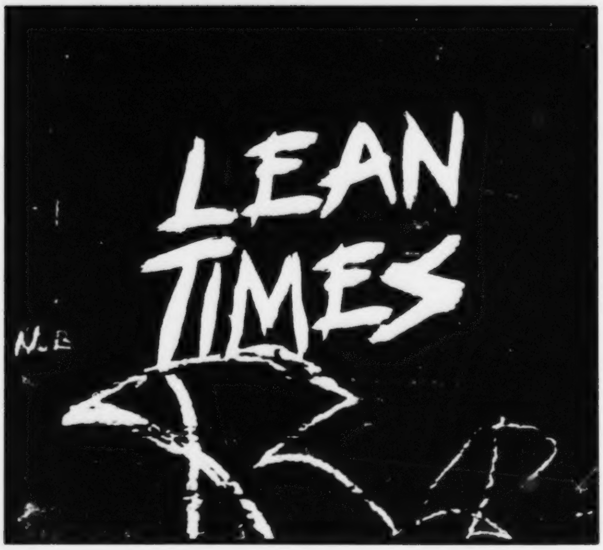
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Policies and Constraints

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This report reflects a consensus of the Economic Council of Canada. However, comment and dissent by Mr. Kaplansky appear after Chapter 6.

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READER'S NOTE

The reader should note that various conventional symbols similar to those used by Statistics Canada have been used in the tables:

--	amount too small to be expressed
..	figures not available
...	figures not appropriate or not applicable
-	nil or zero
e	estimated figures.

Introduction

Canada's economic performance has deteriorated markedly over the past year. The current recession has been both longer and deeper than most observers expected. The downturn has entailed considerable hardship and badly undermined the hope with which Canadians entered the decade of the 1980s.

The real output of the Canadian economy is expected to fall by about 2.5 per cent in 1982, making this the third consecutive year characterized by six months or more of declining real activity. The unemployment rate has moved into the double-digit range and is higher than at any time since the Depression.

Business bankruptcies are running about 40 per cent above their 1981 level, and many firms are facing severe financial strains. The debt/equity ratio of nonfinancial corporations has risen dramatically, and interest payments have come to comprise a dangerously high percentage of pre-tax income. The rise in business failures has important and disturbing implications for the performance of Canada's major financial institutions. As the domestic financial situation has deteriorated, so has our external position. The large amount of external short-term borrowing to finance acquisitions of foreign-owned companies, primarily in the energy area, has left us with a legacy of increased short-term external indebtedness. This has enhanced the vulnerability of the economy to foreign financial market developments and to foreign confidence in the Canadian economy.

While the inflation rate has come down over the past year, progress has been modest in the light of the high degree of slack in the economy. Moreover, as a result of the United States' greater success in reducing inflationary pressures, a substantial differential has emerged between the rates of cost and price increase in Canada and in its major trading partner.

The actions of individual Canadians have come to be conditioned by a pervading mood of gloom. Surveys indicate that businessmen are more pessimistic about the economy than at any time in recent years, and polls suggest that Canadians generally have very little confidence in the ability of governments to control economic forces. The general sense of malaise is reflected in the falloff in business investment, the exceptionally high rate of consumer savings, and the increased preference of savers for shorter-term and relatively liquid financial instruments. The unfavourable psychological climate has also influenced the attitude of foreigners toward investment in Canada and contributed to major shifts in the flow of short-term capital. Despite the relatively high level of Canadian interest rates, the value of the Canadian dollar in U.S. currency has fallen to a record low.

In past Reviews the Council has highlighted the encouraging long-term prospects that are implied by this country's endowment of resources, human capital, plant and equipment, institutions and market opportunities. The Council has repeatedly suggested that with medium-to-long-run policies that provide the appropriate environment for investment and growth, and encouragement for necessary structural adjustment, the country can achieve a favourable long-run economic performance. While a number of variables in the growth equation are less favourable than they were during the 1960s and (to a lesser extent) the 1970s, we believe that the country's long-term prospects are still promising. We can do much better than we are doing now, and we can do better than most of the advanced industrial nations.

The Council continues to have an optimistic view of the underlying strengths of the Canadian economy. This view was never narrowly based on megaprojects, nor was it premised on the takeoff of a particular industry or sector. There has also been a recognition of the pressures, many of which emanate from outside the country, which would cause the economy to periodically stray from its longer-term growth trajectory. While a consideration of the underlying strengths can provide a useful antidote to the pervasive gloom of the day, it is admittedly much more difficult this year to look beyond the formidable hazards and pitfalls that now dominate the landscape. Current economic difficulties have dramatically highlighted the need for policies which will enhance the performance of the Canadian economy and enable it to take advantage of the considerable opportunities that are available.

More fundamentally, the current downturn cannot be viewed as an entirely transitory phenomenon, strictly related to a cyclical decline in the economies of Canada's main trading partners. For three consecutive years now the Canadian economy has experienced bouts of recession, and for six years real growth has either been nonexistent or relatively sluggish. Canada's poor performance is not unique, and the tight monetary conditions and high interest rates in the United States have certainly been a major factor underlying the current North American recession. However, it is also important to appreciate how the course of events has been influenced by the structural characteristics of the Canadian economy. Little progress has been made in recent years in the correction of important structural weaknesses in the Canadian economy, e.g. in developing our transportation and distribution systems on the scale needed for the 1980s; in solving the organizational problems of the fishery and agricultural sectors; in overcoming the paradoxes of high unemployment in some parts of the economy and skill shortages in others; in changing the mix of skill development; in adequately transforming the technology and mix of goods production to suit the knowledge and competitive conditions of the 1980s; and in overcoming some major rigidities and distortions in the economy that enhance the inertia of the inflationary process. Indeed, in some respects, more burdensome and inflexible features have been built into the Canadian economy in recent years.

Cyclical and structural factors have reinforced each other in getting the economy into its current predicament. Government policies have had a major impact on the general economic environment and on the structural parameters that determine how the economy adjusts to important shocks, such as those we are now experiencing.

It has been, and continues to be, the Council's view that a large part of the solution to Canada's economic difficulties lies in the revision of a range of medium-term government policies that influences the dynamics of the market system. In previous reports we considered how regulation, particularly direct economic regulation, has adversely affected the degree of dynamism and innovation in the economy; and we pinpointed a number of deficiencies in government programs in order to improve the functioning of labour markets. In upcoming Council reports we will look at how well government programs have responded to deficiencies in the operation of Canada's financial markets; and we will examine the contribution of Canada's industrial policies to higher rates of technological change and industrial growth. While the specific findings differ in each area, the overall conclusion is that there is much more governments can do to improve the flexibility and responsiveness of the Canadian market system. In many cases government policies have indeed contributed to the problem, helping to create new bottlenecks in the market and introducing rigidities which inhibit the operation of market forces.

In this Review we again consider some important structural issues and policies. Those treated most thoroughly are our balance of payments position, investment prospects, the housing situation, economic development policies and energy policies. We also examine the rigidities and inertia which make inflation a self-feeding process that yields only gradually to demand restraint.

The Council's mandate emphasizes medium-to-long-run prospects, problems and policies, and these continue to be a main thrust of this Review. However, on this occasion more concern than usual must be devoted to the overall stance of demand management policy that is most likely to steer the economy onto the road to sustained recovery and declining inflation. The short-term "bad patch" of inflation, unemployment, and external imbalance of the Canadian economy has turned out to be longer and more severe than we foresaw earlier. The combination of economic and financial problems and their interaction have raised questions of even more severe and prolonged "bad patches." In Canada, as elsewhere, there is danger of an overreaction which could lead to a scramble for more shelter and protection from market forces, thus increasing the odds of depression. Canada's growth could be held back for half a decade. Structural adjustments could be retarded because it is more difficult to justify actions to enhance efficiency and growth when slack abounds. To improve medium-term performance it is necessary to come to grips with short-term realities.

The key question that must be faced is the extent to which an easing of the current restrictive stance of monetary and fiscal policy would facilitate a recovery in output and employment without bringing in its train a resurgence of inflation. There can be no doubt that labour markets are soft enough to exert considerable downward pressure on wages and that enough idle capacity exists to encourage restraint in price setting. The big question mark here, however, concerns the degree to which an easing of policy would worsen inflationary expectations and tend to cancel out any resulting benefits.

This Review examines the scope for an easing of demand management policy within an overall anti-inflationary framework. It also considers various types of incomes policies that offer some promise of bringing down inflation more quickly and at a lower cost in terms of lost output and employment.

The federal government recently implemented one particular type of incomes policy. In the June 28, 1982 budget, it announced that it was imposing mandatory wage guidelines on the federal public service and para-public sectors in order to limit wage increases to 6 and 5 per cent over the next two years. It asked the provinces to take similar action with respect to the public sector under provincial jurisdiction and exhorted the private sector to practice the same degree of restraint voluntarily. The federal government also called on the federal agencies which regulate the prices for such goods and services as public transportation, public communications and foodstuffs, to adhere to the objectives underlying the guidelines. The provinces were encouraged to do the same for their own regulatory agencies.

The question of the conditions under which these guidelines may aid in reducing inflation and in permitting somewhat less slack than will otherwise occur is an important one. Perhaps even more important is to set out an agenda of both structural and macroeconomic changes that might be undertaken during the two-year guideline period to improve the chances of better Canadian economic performance in the medium and longer run.

Concerning macroeconomic or stabilization policy, we believe that governments do have the ability to ease the hardship associated with existing conditions and to improve the overall environment somewhat; but, as we learned all too clearly in the past, measures that are based on an exaggerated view of governments' ability to control the course of economic events, and an inadequate appreciation of real limitations on stabilization policy, can sow the seeds of future instability and reduce the prospects for longer-term growth.

This Review contains six chapters. In Chapter 1 we describe Canada's performance over the recent period, highlighting the unsatisfactory record of recovery and growth since the 1974-75 recession. Chapter 2 provides our analysis of economic prospects over the next five years. In Chapter 3 we single out a number of potentially troublesome medium-term issues for consideration. Chapter 4 is devoted to an examination of federal economic development and energy policies, both of which were a focus of particular attention in the November 12, 1981 federal budget and have been the subject of more recent policy statements. In Chapter 5 we explore in some detail the remedies that are available for our economic ills through manipulation of the traditional macroeconomic policy levers. Our conclusions and recommendations are presented in Chapter 6.

Lean Times

1 Economic Performance in Perspective*

In late 1980 and early 1981, Canada experienced a short spurt of growth, followed in the summer of 1981 by the onset of the most severe recession since the end of the war. The problems facing the Canadian economy have deep roots, however, and the recession cannot be blamed for all our ills. Trends since the mid-1970s have tended to move the economy increasingly away from what might be considered desirable or reasonable medium- and long-term targets. Higher inflation and unemployment, depressed productivity growth, increased deficits on the country's external and fiscal accounts, and the weakened financial position of business have all been features of the economy's performance.

A number of difficult questions arise. When the economic cycle turns up in Canada, will it be a weak, short recovery likely to be followed by another severe and relatively long recession? Have the medium-term trends of worsening performance been due mainly to a succession of temporary adverse shocks outside and inside Canada? Has Canadian economic policy itself worsened the situation, or has the poor performance occurred despite a generally appropriate setting of policy? Do unfavourable trends reflect deep and more enduring features of the Canadian economy – or of Canadian economic policy? If structural problems are at the root of current difficulties, why have we been so slow in initiating the necessary adjustments?

The purpose of this chapter is to describe Canada's recent economic performance and to put it into the perspective of medium-to-longer-term trends and targets. We also describe some of the main forces and policies that have been operative, as a point of departure for our general inquiry into the nature of the policies that are required to improve Canada's economic performance.

The External Environment

The last few years have been turbulent ones for the world economy. Political disturbances in the Middle East disrupted the balance of supply and demand in the international oil market, resulting in a price increase of 150 per cent between the end of 1978 and 1980. The Organisation for Economic Co-operation and Development (OECD) has estimated that this oil price shock resulted in a real income loss to OECD countries equivalent to 2 per cent of their OECD GNP and that it contributed 2 percentage points to inflation, as measured by the consumer price index. This impact was on the same order of magnitude as that of the 1973-74 oil price hike. While the percentage increase was only about one third as large as in 1973-74, the dollar increase was comparable.

The real income loss exerted a depressing effect on real growth, and the passthrough of the higher energy costs sent an inflationary impulse reverberating through the world economy. Governments responded by tightening demand management policies in order to prevent the price bulge from being built into domestic cost structures. This strategy, which differed from the more accommodative one pursued after the 1973-74 oil price shock, was successful in containing inflation, but it did so at the cost of lost output and high unemployment. Chart 1-1 illustrates the dramatic slowing in real growth from the high growth registered in the 1976-79 recovery period to the 1980-81 period, during which the second oil price shock was absorbed. The acceleration in inflation over the same two periods is shown in Chart 1-2. By 1981, inflation was on the wane in most of the OECD countries, but unemployment has continued at a high rate.

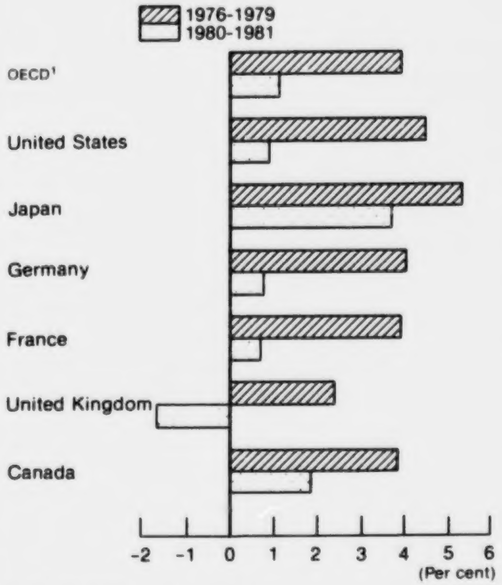
The twin problems of recession and inflation are inextricably intertwined. The 1979-80 oil price rise touched off a worldwide resurgence of inflation. Governments throughout the industrialized world responded by tightening monetary and fiscal policy to forestall a domestic wage/price spiral.

Monetary policy was especially tight in the United States, where the Federal Reserve Board was rigorously pursuing its ambitious monetary growth targets.

This chapter reflects data available as of August 12, 1982.

Chart 1-1

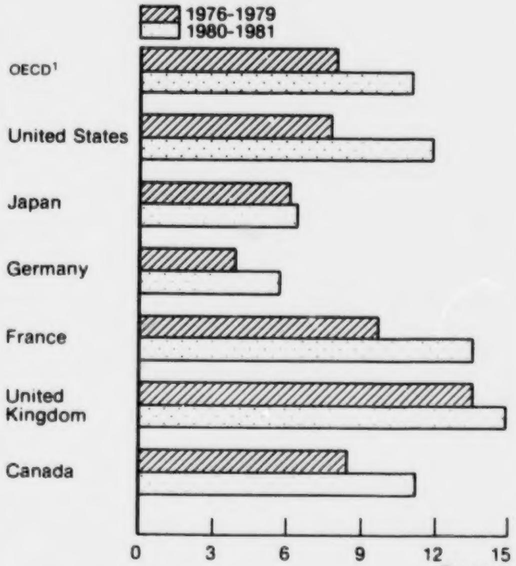
Growth Rate of Real Domestic Product, Major OECD Countries, 1976-81



1 Seven major OECD countries.
SOURCE Organisation for Economic Co-operation and Development, *Economic Outlook* (Paris: OECD, July 1982).

Chart 1-2

Consumer Price Inflation, Major OECD Countries, 1976-81



1 Seven major OECD countries.
SOURCE Organisation for Economic Co-operation and Development, *Economic Outlook* (Paris: OECD, July 1982).

The sharp run-up in interest rates buttressed by the simultaneous imposition of credit controls in the first half of 1980 ushered in the 1980 U.S. recession. The subsequent recovery was spurred by falling interest rates. The return to high interest rates in 1981 aborted the recovery and spawned the second recession.

A number of changes in the international trading environment have also emerged, more of them unfavourable than favourable to Canadian interests. Partly reflecting adjustments to the increased prices of oil but mainly due to longer-run shifts of comparative advantage, exports from Japan and from the newly industrialized countries (NICS) have increased rapidly. These developments have already put strains on some of the established industries in the older industrialized economies, and have given rise to deep worries about the future. There has already been some increased use of nontariff barriers to trade, and the cries for more protection have become intense in many countries. Also, the use of economic sanctions as a political weapon has increased. And the ability of some countries to service their international debts has deteriorated, leading to retrenchment in international finance and spillover effects that dampen external trade. The widespread experience of severe unemployment is encouraging neomercantilist actions by many countries to stimulate exports and discourage imports. Nevertheless, the phased tariff cuts from the Tokyo Round of GATT negotiations have begun to come into effect. The increase in protectionism and application of neomercantilist ideas have been limited thus far, but the signs for the future are not promising, particularly if unemployment remains high.

The Canadian economy was swept along by these events and by Canadian policy responses. The oil price shock did not directly raise Canadian inflation; it did, however, set the stage for the National Energy Program, which mandated increases in Canadian energy prices. International inflation, set in train by the oil price increase, buffeted the Canadian economy. The upward pull of U.S. interest rates has been especially strong. We turn now to highlights of Canadian economic performance, to some of the main forces in play, and then to a review of Canadian policy.

The Main Indicators of Canadian Performance

In 1981 the Canadian economy slipped into its second recession in two years. This recession has turned out to be the most severe in the postwar period. It followed a short period of relatively strong growth in late 1980 and the first half of 1981 – the shortest recovery on record since the war. The recession has continued, and real gross national expenditure (GNE) is expected to decline by 2.5 per cent in 1982.

The juxtaposition of the two recessions, in 1980 and 1981-82, is expected to keep average real growth to virtually zero over this period. This represents a significant slowdown from the 3.1 per cent growth averaged over the 1975-79 period of recovery from the 1974-75 recession. The slowdown is even more striking relative to the 1960s and the early 1970s, when real growth averaged about 5.5 per cent.

The unemployment rate has jumped to almost 12 per cent as a result of the recession. Layoffs have mounted. Employment has fallen. The manufacturing sector has been hard hit.

In the midst of the recession, inflation has not only persisted but worsened. The consumer price index (CPI) rose 12.5 per cent in 1981 – higher than the 11 per cent recorded in both 1974 and 1975, the two years preceding the imposition of wage and price controls. Until recent months the rate of increase of the CPI accelerated continuously from the time of the withdrawal of wage and price controls.

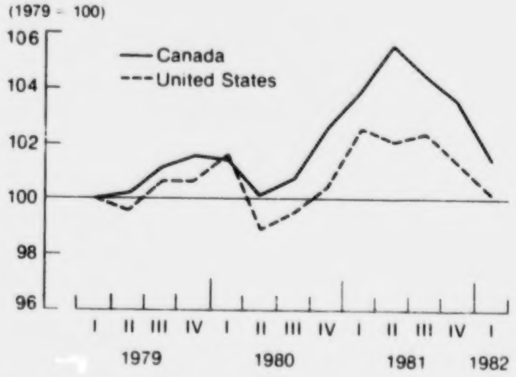
Demand

Demand in the Canadian economy (i.e. expenditure on newly produced goods and services) increased fairly strongly in late 1980 and the first half of 1981. The more recent weakness reflects monetary and fiscal restraint, weak business finances and the reluctance of consumers to spend. But even more important has been the absorption of this demand by higher prices, which over the last year has resulted in a substantial decline in output.

The economy enjoyed a strong real rate of growth in late 1980 and early 1981, but the recovery was short-lived (Chart 1-3). The economy plunged into a new recession midway through 1981, and real output declined by 2 per cent over the last half of the year. For 1981 as a whole, real output increased by 3.1 per cent. This looks like a marked improvement compared with the lack of growth in 1980, but it is a deceptive statistic because all the growth was concentrated in the first half of the year.

Chart 1-3

Quarterly Index of Real Growth, Canada and United States, 1979 to First Quarter 1982



SOURCE Estimates by the Economic Council of Canada based on data from Statistics Canada

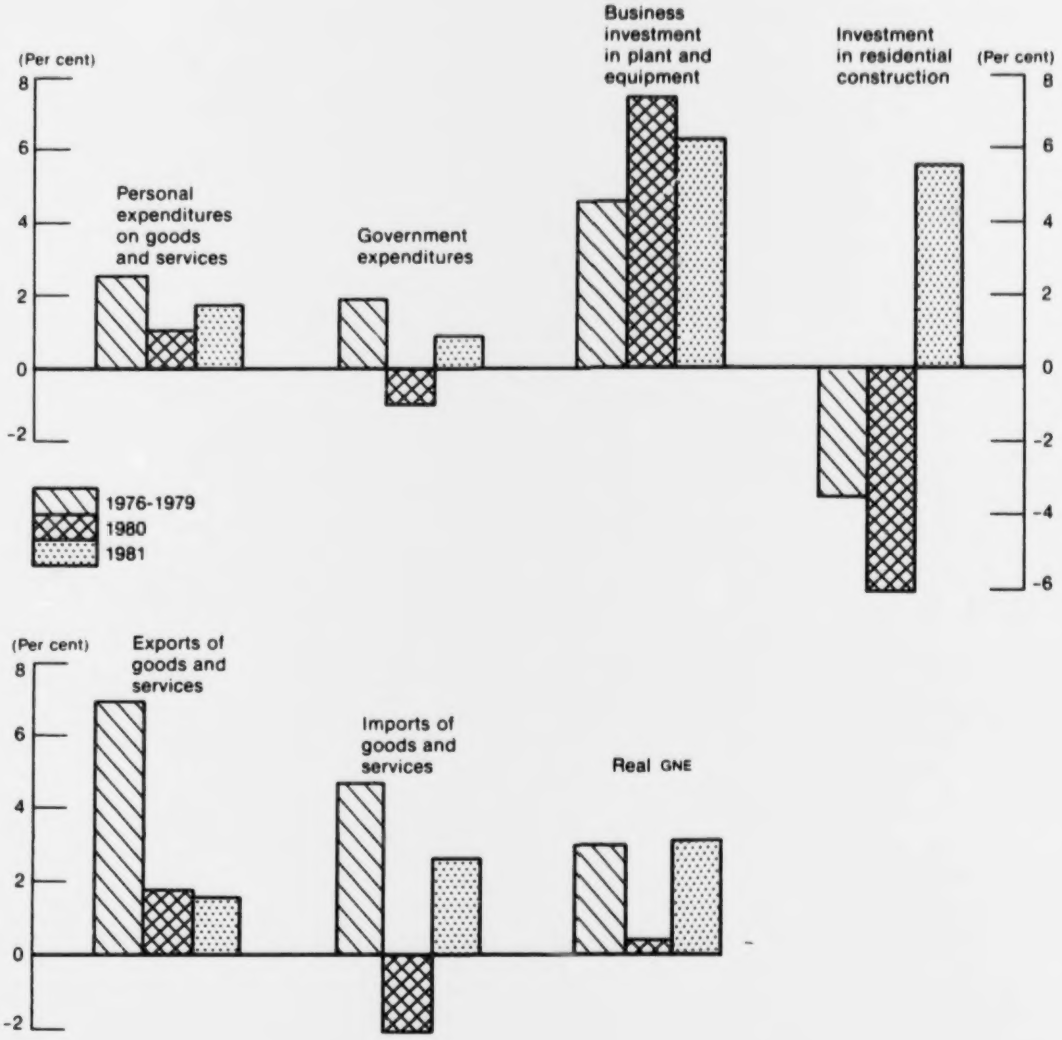
The year 1981 was the fifth consecutive one in which the real growth of the Canadian economy was below 4 per cent. This marks a dramatic deterioration from the almost 5.5 per cent growth recorded from 1960 to 1973 – in retrospect, a period of remarkable growth. While the Canadian economy was in an expansionary phase of the business cycle between 1976 and 1979, the pace of that expansion was relatively modest; the annual rate of real growth averaged only 3.5 per cent. Much of the impetus for the growth that did occur over that period came from foreign demand and could be traced to the strengthening of the U.S. economy and the 20 per cent depreciation of the Canadian dollar against other currencies over 1977 and 1978. Only in the latter stages of this expansion, as demand finally met capacity, did business investment also become a significant source of strength.

More recently, the real growth performance of the economy has been a result of several factors (Chart 1-4). Real personal expenditure on goods and services, which grew at a modest rate of 2.5 per cent from 1976 to 1979, advanced at only about a 1.5 per cent rate in 1980 and 1981. Consumer spending on durables, which had been the strongest component of personal expenditure over the previous two years, declined in real terms between 1979 and 1981. Real personal disposable income, which grew modestly in 1980, increased by almost 4 per cent in 1981; but the savings rate of individuals moved up as well (from 11.2 per cent in 1980 to 12.4 per cent in 1981). Very high real interest rates have encouraged consumers to curb their discretionary spending and delay their purchases of durable goods. During the second half of 1981, heightened economic uncertainty combined with the decline in employment and lack of growth in real labour income also tightened consumers' purse strings.

A source of uncertainty is the divergent experience of individuals and households in the recent period. Some are worse off. These include: the unemployed; workers on reduced hours; persons on fixed income; and those with large debts subject to renewal at high interest rates. Some are better off. These include

Chart 1-4

Real Growth, by Demand Component, Canada, 1976-81



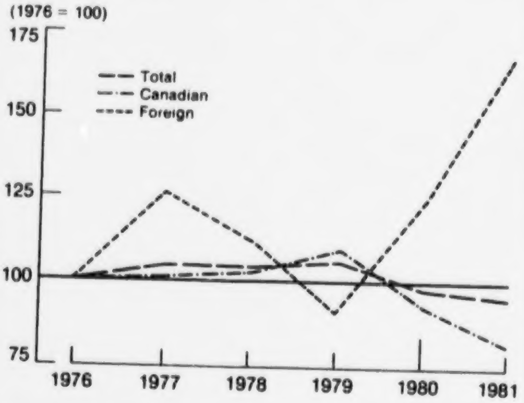
SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada.

most notably those with high savings and low debt, who benefit from high interest rates.

The recent recessions have accentuated the difficulties of the North American auto industry (Chart 1-5). Passenger car sales in Canada fell to 907,000 units in 1981 – a level not witnessed since 1973. Between 1979 and 1981, sales of new North American cars declined by 25 per cent, while the share of the Canadian auto market held by overseas producers more than doubled. The latter trend was slowed but not halted by a quota agreement worked out with Japanese automakers early in 1981. The hard times faced by the auto industry stem in part from such traditional cyclical factors as the sluggish economic conditions and high interest rates that have generally weakened the demand for durable goods. But to a considerable degree, they are also symptomatic of a more fundamental problem of structural adjustment. Domestic producers are increasingly facing tough competition from aggressive and technologically advanced overseas producers, who have the advantage of relatively favourable labour costs and more experience in manufacturing small fuel-efficient vehicles. The automobile industry has been hit harder in the United States than in Canada, at least partly because of the strength of the U.S. dollar. The U.S. industry is currently taking steps to bring its costs more into line with those of its foreign competitors.

Chart 1-5

Index of New Passenger Car Sales, Canada, 1976-81



SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada.

Residential construction, which was the weakest sector of the economy in 1980 and in the three previous years, displayed significant strength in the first half of 1981; but spending on housing declined sharply thereafter (Table 1-1). High interest rates continued to exert an especially depressing influence on this industry. Housing starts, which stood at 158,600 in 1980, after four years of decline from a 1976 high of 273,200, climbed to an annual rate of 203,000 in the first half of 1981, only a little below the level required to keep pace with demographic demand. Nevertheless, housing prices rose strongly into 1981, particularly in tight housing markets such as Vancouver. The weakness in the second half of 1981 dragged the starts for the year down to 178,000. Housing prices also stabilized, and in some markets such as Vancouver, where the run-up had been especially sharp, prices actually dropped. Due to the strength in the first half of the year, real investment in residential construction increased by 5.6 per cent in 1981. While this sector continued to feel the effects of slow income growth, high mortgage rates, and rental controls in some provinces, there were some offsetting influences at work in 1981. Vacancies, both among new single houses and rental accommodation, were exceptionally low by the end of 1980; and this, in combination with strong underlying demographic demand, probably encouraged some speculative investment in the first half of 1981. Construction of multiple units, particularly near the end of 1981, was also stimulated by the reintroduction and subsequent termination of the Multiple Unit Residential Building (MURB) program. In large part, however, this may have merely pulled some new construction forward into 1981 from 1982. Some provincial incentives, such as the interest-free deferred payment loans or low-interest loans offered by the Ontario and Alberta governments to builders of rental apartments, may have also encouraged the construction of multiple units.

Housing starts registered a seasonally adjusted annual rate of 177,000 units during the first quarter of 1982, up from 134,000 units in the fourth quarter of 1981. This increase stems primarily from the sharp increase in multiple units – up 38.7 per cent, vs that of single units, which increased by only 9.7 per cent. The surge in apartment construction may be attributable to the low vacancy rates across the country, developers' expectations of significant increases in housing prices, and the expiry of residential tax provisions.

This improvement in the housing situation proved to be short-lived as housing starts fell off to an annual rate of 117,000 units during the second quarter of 1982. Single detached housing starts, reacting to the

Table 1-1

Housing Starts, Canada, 1976-81

	Number of housing starts						Seasonally adjusted, annual rate			
							1980		1981	
	1976	1977	1978	1979	1980	1981	First half	Second half	First half	Second half
	(Thousands)									
Single	134.3	108.4	110.0	109.1	87.7	89.1	81.0	94.5	120.0	64.5
Multiple	138.9	137.3	117.7	87.9	70.9	88.9	76.0	68.5	83.0	92.0
Total	273.2	245.7	227.7	197.0	158.6	178.0	157.0	163.0	203.0	156.5

SOURCE Canada Mortgage and Housing Corporation, *Canadian Housing Statistics*, various issues.

high mortgage interest rates that reached the 20 per cent level in mid-June, were particularly hard hit as they registered a decline of about 60 per cent from their level of the year before. Similarly, multiple units were down roughly 27 per cent.

Business investment, which was a major source of strength in 1979 and 1980, continued to outpace the growth in aggregate demand over 1981, though it began to weaken in the second half of the year. Business investment in plant and equipment, which averaged 14 per cent of GNP from 1976 to 1979, increased to 16 per cent in 1980 and to 16.5 per cent in 1981 (Table 1-2). The strength of investment was the result of a large number of projects in energy and energy-related activities (Table 1-3), the efforts by firms in a number of industries to expand capacity in the face of the relatively high rates of utilization temporarily reached in the first half of 1981, and possibly the accelerated obsolescence brought about by surging energy costs. In the first quarter of 1981, capacity utilization rates were over 90 per cent in several manufacturing industries, including food and beverages, leather products, textiles, knitting, paper, printing and publishing, wood products, primary metals and metal fabricating. By the second half of 1981, however, some effects of the unfavourable investment climate, created by the coincidence of high financing costs, weak final demand and falling operating rates, were in evidence. While ongoing investments in energy, along with other projects such as the modernization of pulp and paper mills, helped to sustain nonresidential construction, real spending on machinery and equipment dropped by 5 per cent in the final half of the year.

Table 1-2

Investment in Machinery and Equipment and in Nonresidential Construction, Canada, 1976-81

	Proportion of GNE					
	1976	1977	1978	1979	1980	1981
	(Per cent)					
Current-dollar expenditures:						
Machinery and equipment	7.4	7.2	7.4	8.0	8.3	8.5
Nonresidential construction	6.3	6.5	6.3	6.9	7.7	8.2
Total	13.7	13.7	13.7	14.9	16.0	16.7
Constant-dollar expenditures:						
Machinery and equipment	8.0	7.8	7.6	8.3	8.6	8.7
Nonresidential construction	6.2	6.3	6.1	6.7	7.4	7.8
Total	14.2	14.1	13.7	15.0	16.0	16.5

SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada.

Table 1-3

Manufacturing and Energy Investments, in Current Dollars, Canada, 1976-81

	Proportion of GNE	
	Manufacturing	Energy-related industries
	(Per cent)	
1976	2.9	3.8
1977	2.9	4.0
1978	2.7	4.2
1979	2.8	4.4
1980[1]	3.3	4.7
1981[1]	3.8	5.1

[1] Preliminary data.

SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada.

The first quarter of 1982 saw the business sector facing poor markets, weak balance sheets, high interest rates and excess industrial capacity. Thus rather than providing a fillip to the economy, the business sector proved to be a major source of weakness in early 1982. Business investment in nonresidential construction, which recently had been a source of strength, declined by nearly 5.5 per cent during the first quarter of 1982. This reflected a fall in investment in structures and in machinery and equipment of 3.8 and 7.1 per cent respectively. The decline in the latter was considerably higher than in the former since it can be adjusted more readily to changes in economic activity.

Inventory accumulation contributed to the strength of business spending in 1981. There was a marked turnaround between 1980 and 1981 from liquidation to restocking, with the constant dollar value of the change in inventory swinging from –0.6 per cent to 0.5 per cent of GNP. The ratio of inventory to sales has fluctuated widely in recent years. Inventory accumulation was minimal in 1977 and 1978; by the end of 1978, inventories were at a historically low level relative to sales. The inventory/sales ratio moved sharply higher as a result of heavy stockbuilding in 1979 and the early part of 1980, but declined even more rapidly as firms adjusted to slack demand over the latter half of 1980. The inventory accumulation that occurred in 1981 resulted from some investment early in the year to rebuild stocks, and from the widespread effects later in the year of the general downturn in demand. It was not until the fourth quarter of 1981 that inventories were cut back.

The volume of nonfarm inventories fell by more than $2 billion in the first quarter of 1982 as businesses attempted to adjust production to match falling demand, thus trying to establish prudent inventory/sales ratios. The decline was concentrated largely in the retail and wholesale trade sectors, notably in the automotive sector, whereas only a small decline was registered in the stock of the manufacturing sector. The ratio of manufacturers' inventories to shipments remains high by historical standards, which suggests that further declines in output and employment may be forthcoming.

The current state of the economy, given the recession, inflation and high borrowing costs, has had an adverse impact on the financial position and attitudes of the business sector. Corporate profits in the first quarter of 1982 were down by 37.7 per cent over the same period of the previous year and by 16 per cent from the previous quarter. This was the fourth consecutive quarter in which profits fell and is the largest decline since 1947. The most rapidly increasing component of corporate expenses has been interest costs. The "interest burden" rose to 44.7 per cent in 1981 from 28.1 per cent in 1980. Corporations are rapidly becoming more exposed to the current volatile interest rates as they must borrow increasingly at rates that fluctuate with the prime rate instead of relying on long-term borrowing or equity financing.

The latest Conference Board *Survey of Business Attitudes* suggests that "business confidence in the investment climate continued to deteriorate in the first quarter" of 1982. This coincides with Statistics Canada's survey, *Private and Public Investment in Canada: Mid-Year Review* for 1982, which reports that capital spending in the business sector will increase by only 3.6 per cent in 1982. Given the rate of inflation, this translates into a substantial decline in real investment spending. Impediments to higher business investment spending are: high interest rates, weak market demand, government policies, poor profit performance, current liquidity position, and underutilization of existing capacity.

The available data suggest that during the early part of 1982 the slowdown broadened and deepened, affecting employment and output in virtually every sector. Real output fell by 2 per cent in the first quarter of this year alone. All the major components of demand, with the exception of the government, registered declines. The external sector is the only component to show increased strength and this has resulted not from a growth in exports, which fell by about 4 per cent, but from the extreme weakness of imports, down 11 per cent. The drop in imports was led by reduced demand for crude petroleum, coal, rolling mill products, and industrial and agricultural machinery. Real personal expenditure weakened further early in the year. Demand was lower in the majority of components, with the most pronounced declines occurring in the durable and semidurable sectors – 4 per cent and 2.6 per cent respectively. Expenditures on services were also down by 0.8 per cent – the first such showing since the first quarter of 1981. The support provided to the economy over 1981 by housing investment and business spending on new plant and equipment has dissipated.

Corporate Finances

Allusions have been made to the weakening of profits and to the increases in interest costs. Since the spring of 1982, however, the picture that has emerged is of much greater and deeper financial strain on the Canadian business sector than can be explained by the usual ebb and flow of business cycles. Financial conditions began to change significantly in 1980, when profit margins of industrial corporations (as measured by the ratio of net income to sales) declined from the peak attained in the fourth quarter of 1979, and when the growth in their base profits fell to 10 per cent from 43 per cent in the previous year. While overall profits in 1980 were depressed by the substantial losses sustained by motor vehicle manufacturers, they received a significant boost from the sharply higher earnings of the oil and gas industry. The year 1981 saw a continuing downtrend in profit margins and a significant drop in base profits (which extended this year to the oil and gas industry). This slide has continued in 1982, and in the first quarter of this year the profit margins of large industrial corporations were cut to 2.8 per cent. In line with these developments, the share of net national income going to corporate profits, which had increased to 16.6 per cent by 1979, fell precipitously to 12.8 per cent in 1981. In the first quarter of 1982 the profit share was down to 8.8 per cent, almost half what it was three years ago.

In the wake of their poor earnings, industrial corporations have become more dependent on external sources of funds to finance their investment. The share of financial requirements met through outside equity, along with long-term and short-term borrowings, increased significantly in both 1980 and 1981, reaching 52 per cent in 1981 – its highest level since 1976. The growth in corporate debt, moreover, has been increasingly slanted toward the short end of the market, with firms attempting to minimize the risk resulting from high and variable rates of inflation. The funds raised through bank loans and other short-term instruments have grown; at the same time much long-term debt is now subject to floating interest rates and shorter or flexible maturities.

The combination of greatly reduced profits and growing debt commitments has led to a marked decline in a number of the traditional measures of corporate financial health (Table 1-4). The debt/equity ratio of industrial corporations rose sharply in 1981, and it is now significantly above its average level during the last five years. The burden of carrying an increased debt load at very high interest rates during a period of falling revenue has left its mark on corporate financial statements. Interest payments, which constituted only about 20 per cent of pre-tax income in 1979, increased to more than twice that proportion by 1981. And in the first quarter of 1982 the ratio of interest payments to pre-tax income for larger industrial corporations jumped to a perilously high 79 per cent. The extent to which current liabilities are backed by liquid assets, and thereby protected in case of a financial contingency, has also fallen sharply. The ratio of current assets less inventories to current liabilities – known as the "quick ratio" – fell from 93 per cent in 1978 to 84 per cent in 1981.

Table 1-4

Selected Financial Data Pertaining to Large Industrial Corporations, Canada, 1977-81

	1977	1978	1979	1980	1981
Ratio of:					
Income before tax to sales	0.07	0.08	0.10	0.10	0.08
Internal funds to capital outlays	0.77	0.82	0.86	0.71	0.48
Debt to equity	1.24	1.24	1.27	1.25	1.35
Interest payments to income before tax	0.26	0.24	0.20	0.25	0.44
Current assets less inventories to current liabilities	0.89	0.93	0.91	0.89	0.84
			(Percentage change)		
Base profits	..	19.30	42.63	10.10	-6.21

SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada.

Industrial corporations are clearly being severely strained by the current combination of slackening economic activity and high interest rates. Corporations that extended themselves financially in recent years in anticipation of more buoyant economic conditions are finding themselves in particularly difficult circumstances. Business bankruptcies rose 22 per cent in 1981 and in the first half of 1982 were up an additional 37 per cent from the same period in 1981. An increased number of firms have gone into receivership and many small firms have simply closed their doors.

It is not only the larger industrial corporations that are experiencing weaker profits and are in a financial squeeze. Small and medium-sized firms are also going through a period of financial stringency. This includes unincorporated as well as incorporated businesses and such important groups as farmers and fishermen.

Financial institutions are experiencing very large increases in noncurrent loans and loan losses as a result of the deterioration in the financial position of nonfinancial corporations. In the six months ending April 30, 1982, provision for loan losses made by the 11 chartered banks rose by 55 per cent to $607 million. Analysts are predicting that by the end of the banks' current fiscal year, October 31, provisions for loan losses will rise to $1.7 billion – a substantial jump from the $0.8 billion mark registered in 1981. The anticipated increase is the result of high interest rates as a growing number of large corporations find it increasingly difficult to meet their interest payments on loans.

Prices and Costs

One of the most disturbing features of current performance has been the ability of the Canadian economy to sustain exceptionally high rates of price increase in spite of the very substantial weakness in economic activity since 1980. Inflation, as measured by the CPI, gathered momentum in 1980 and 1981, as it had every year since 1976 (Chart 1-6). It was only in the second half of 1981 that it started to moderate. This moderating trend has continued into 1982.

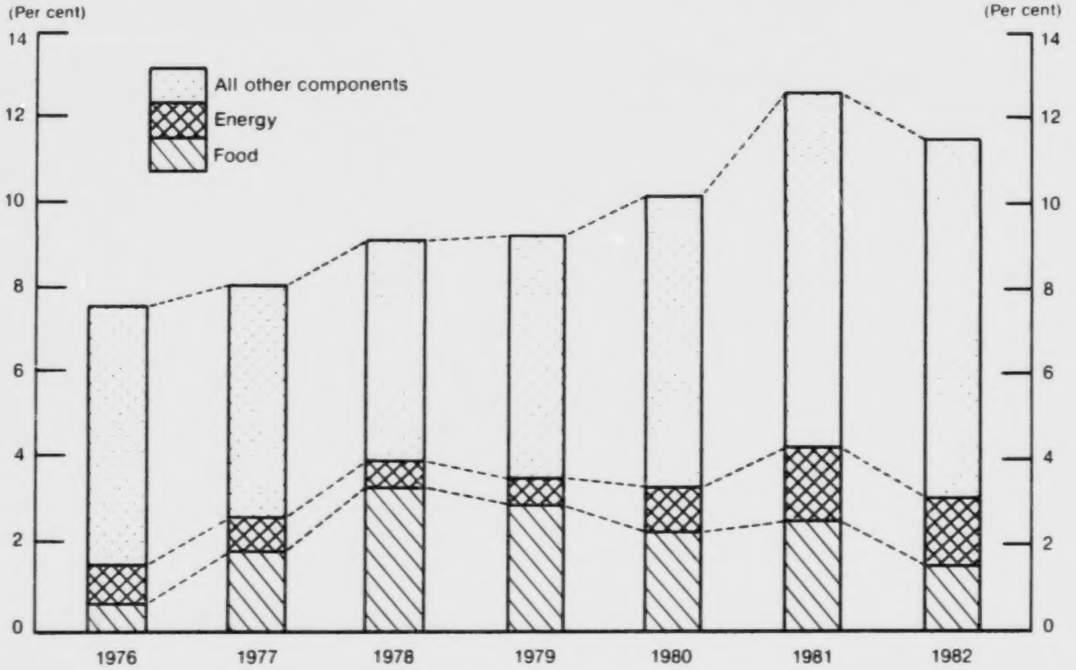
Higher energy prices have been a major contributor to the high rates of inflation, with the CPI for energy advancing by 16 per cent in 1980 and by 30 per cent in 1981. While Canadians were initially shielded from increases in world energy prices, they are now feeling the effects of adjusting to the fundamental shift that has occurred in relative energy prices. The latest increases stem from a combination of increased wellhead prices for oil, new taxes arising out of the National Energy Program and the subsequent energy agreements with the provinces, and the introduction by several provinces of *ad valorem* charges in place of their unit taxes on gasoline and diesel fuel. Food prices contributed to the inflationary trend over the latter half of 1980, but they became a moderating influence during the final six months of 1981 as a result of favourable crops and intensified competition at the retail level. The CPI, excluding food and energy, increased by 9.4 per cent in 1980 and by 10.9 per cent in 1981, largely reflecting the underlying increases in unit labour costs.

The recent trend in consumer prices represents the continuation of a longer-term deterioration in Canada's price performance. It was only a decade ago – though it seems much longer – that the norm involved annual consumer price increases that were well below 5 per cent. In the latest round of increases, the rate escalated from 7.5 per cent in 1976 to 12.5 per cent in 1981 (Chart 1-6). While the economy was on an expansionary course over much of this period, this by itself does not offer a complete explanation for the uptrend in inflation. For both domestic and international reasons, food prices, an important factor, increased at an average rate in excess of 14 per cent over 1978 and 1979 before settling down somewhat in 1980. The period since 1976 has also been marked by strong pressure from other international prices. While Canadian energy price increases were relatively moderate prior to 1980, the surge in international oil prices, triggered by events in Iran in 1978-79, affected the production costs of Canada's trading partners and thus the costs of Canadian imports. Inflation also picked up in the United States in 1979 in response to rising demand. The depreciation of the Canadian dollar in 1977 and 1978 added to the upward pressure on import prices, with the result that the GNE import price deflator, which was virtually constant in 1976, increased at rates of 13.6 to 16.7 per cent over the period 1978-80. In 1978 and 1979 a widening of profit margins contributed to inflation. It was only during 1981 that profit margins really got squeezed between rising costs and falling output. Beginning in 1979, wage costs became an important influence on the upward course of Canadian prices.

The pattern of wage settlements has come to reflect the recent very high rates of inflation and the apparent expectation that high rates are likely to persist (Table 1-5). Average weekly wages and salaries increased at an annual rate of about 12 per cent in 1981. This was about double the rate in 1978, when controls were removed – although still a couple of percentage points lower than in 1975, the year

Chart 1-6

Contribution of Food and Energy to the Change in the Consumer Price Index, Canada, 1976 to First Half 1982



SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada.

Table 1-5

Increase in Wages and Labour Costs, Canada, 1977-81

	1977	1978	1979	1980	1981
			(Per cent)		
Average weekly wages and salaries	9.6	6.2	8.6	10.1	12.1
Real wages and salaries	1.5	-2.5	-0.5	-0.1	-0.5
Unit labour costs	6.2	5.1	7.7	11.1	10.4

SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada.

that controls were imposed. The increase in base rates of major collective agreements with no cost-of-living adjustment clauses (COLAs) accelerated from 7.1 per cent in 1978 to 13.4 per cent in 1981. Public sector wage increases have followed the upward trend, although negotiated wage gains have lagged marginally behind those in the private sector – as distinct from the situation in 1975 and 1976, prior to the implementation of controls (Table 1-6). While pay rates also escalated in the United States until 1980, the trend turned downward in 1981. In that country the rate of increase in wages and benefits in major contracts without COLAs rose from 7.2 per cent in 1978 to 10.6 per cent in 1980 and then declined to 9 per cent in 1981. The deceleration in the growth of labour costs over the last quarter of 1981 and the first quarter of 1982 was particularly marked. Recent U.S. settlements have been among the most moderate in several decades, with unions in the trucking, meat packing, automaking and rubber industries settling for minimal increases in an effort to protect jobs. Some even allowed contracts to be reopened to lower wages.

The contrast between U.S. and Canadian wage behaviour in recent months has been striking. Wages in the United States seem to be responding not only more strongly but more quickly to the high and rising

Table 1-6

Increase in Major Wage Settlements,[1] Canada, 1973-81

	1973	1974	1975	1976	1977	1978	1979	1980	1981
					(Per cent)				
Commercial	12.0	15.2	17.6	10.7	7.9	7.6	9.5	11.5	14.0
Manufacturing	12.2	16.1	16.4	10.5	7.8	7.8	9.9	12.0	12.6
Noncommercial	9.9	14.4	19.9	11.1	7.9	6.7	8.2	10.9	13.2
Education; health and welfare	10.0	21.5	21.8	10.8	6.9	6.5	8.1	11.1	13.6
Federal administration	12.0	11.2	13.9	11.9	9.5	6.7	8.3	10.8	12.8
Provincial administration	10.3	14.2	25.1	11.2	7.6	7.2	8.3	11.2	13.3
Municipal administration	9.8	12.6	16.5	10.4	7.9	6.4	8.7	10.6	13.4
All industries	11.0	14.7	19.2	10.9	7.9	7.1	8.7	11.1	13.4

[1] Increase in the base rates for collective agreements without COLAs.

SOURCE Data from Labour Canada

rates of unemployment. However, recent Canadian data on wage settlements and average weekly wages and salaries suggest that wage increases began to moderate in early 1982. Over the first half of 1982, for example, the negotiated increase in major contracts without COLAs was 12.5 per cent. High unemployment and the government's compensation restraint program should ensure a further slowdown in the rate of wage increases, which should narrow the gap between wage settlements in Canada and the United States.

The year-over-year increase in the CPI, which had accelerated steadily, rising from 9.4 per cent in the first quarter of 1980 to 12.7 per cent in the third quarter of 1981, finally began to move downward in the fourth quarter of last year. Progress has continued in 1982, and during the first half of this year, the year-over-year increase in the CPI averaged 11.5 per cent. These gains are partly attributable to the temporary moderation in food prices. They also stem from the general weakening of activity in world markets, which began to be reflected in lower commodity prices and in the favourable course of the industry selling price index early in 1982. Those prices subject to government regulation or control – transport prices, utility charges, postal rates, liquor prices – continued to exert strong upward pressure on the CPI over the latter part of 1981 and early 1982. This accords with the behaviour of administered prices in the past and is consistent with their lesser degree of sensitivity to demand fluctuations over the business cycle. In areas more responsive to market forces, however, there is growing evidence of a softening in prices.

Employment and Unemployment

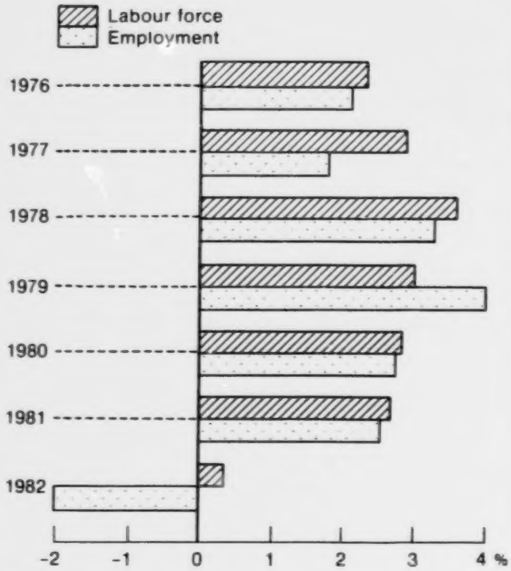
For several years up to early 1981, one of the most notable features of the Canadian economy was the continued rapid growth in employment, despite the more moderate growth of real output. Though the trend in unemployment rates was up, the increase was much smaller than many people expected. Since mid-1981, however, the surprises have been of the opposite kind. Employment has fallen absolutely. Even though labour force participation rates have fallen, reversing a trend of many years, unemployment has increased to modern record levels.

Looking at recent experience, unemployment, which had declined since mid-1980, moved sharply upward in the latter months of 1981, rising to a seasonally adjusted rate of 8.6 per cent in December. It has continued to rise in 1982 and now is nearly 12 per cent, a postwar record. Employment growth in 1980 and 1981 was respectable – 2.8 per cent and 2.6 per cent, respectively – although far below the 4 per cent rate recorded in 1979 (Chart 1-7). These annual averages, however, conceal the highly variable performance of the labour market over the last two years and the extremely slack conditions in the second quarter of 1980 and the fourth quarter of 1981. The quarterly change in employment, for example, which was an impressive 1.2 per cent in the first quarter of 1981 (seasonally adjusted), was –0.7 per cent in the final quarter of the year. The extreme weakness of the economy has contributed to a further decline in both employment and participation rates over the early part of 1982.

For five consecutive years, the rate of unemployment has averaged 7.5 per cent or higher. Employment growth, which was weak during the initial period of recovery from the 1974-75 recession, began to accelerate by 1978. After increasing strongly in 1979, however, employment growth began to decline, and if we look back over the entire period from 1976 to 1981, 1979 stands out as the only year in which growth in employment exceeded labour force growth.

Chart 1-7

Annual Growth in the Labour Force and in Employment, Canada, 1976 to First Half 1982



SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada.

This recent experience is related in part to a longer-term upward drift in Canada's unemployment rate. While unemployment stayed almost consistently below 5.5 per cent throughout the 1960s, it was regularly above that rate during the 1970s. The deterioration in Canada's performance with respect to both unemployment and inflation has been attributed to price shocks, the macro policy record, institutional changes, and changes in the age/sex composition of the labour force. Acting upon one another and upon the inflationary psychology of individuals, these factors have contributed to a significant transformation in Canada's economic environment.

While consideration of institutional, demographic and other factors helps to explain Canada's high rates of unemployment, it does not in any sense suggest that the existing levels of joblessness are, even in the short run, the best that can be expected. Considerable attention has been devoted to estimating the inflationary costs of reducing unemployment. Particular interest has focused on the estimation of a critical unemployment rate, known as the "nonaccelerating inflation rate of unemployment" (NAIRU). As the theory goes, attempts to reduce unemployment below the NAIRU through expansionary policies are self-defeating, resulting only in ever-accelerating inflation. Once the efforts to lower unemployment were abandoned, the economy would be left with a legacy of higher inflation and unchanged unemployment. It has been estimated that the Canadian NAIRU is in the order of 6.5 to 7 per cent. Recent institutional developments – namely, the 1977 and 1979 revisions in the unemployment insurance system (curtailing benefits) and the more modest trend in legislated minimum wages – would tend to reduce the NAIRU about half a percentage point below these estimates. Nevertheless, the NAIRU is well below the almost 12 per cent current level of unemployment. This would suggest that the current unemployment level should exert downward pressure on increases in wage costs.

While all groups have felt the effects of the recent slowdown in economic activity, the impact has fallen especially heavily on certain age groups and certain regions (Table 1-7). Employment declined in the last quarter of 1981 for all groups, but while the decline was marginal in the case of those 25 and over, it exceeded 3 per cent for men aged 15-24. The unemployment rate (seasonally adjusted) for those under 24 has continued to climb in 1982, moving over the 20 per cent mark. Among regions, the Atlantic provinces have, as usual, suffered from the greatest unemployment. British Columbia and Quebec, however, have been heavily affected by the decline in forestry and other primary industries, as well as by the general weakness in manufacturing.

A further perspective on the nature of unemployment in the Canadian economy was provided in a recent Council study, a chapter of which focused on the dynamics of the labour market and the movement of people into and out of unemployment in recent years. One of the interesting findings of that study was that while the average unemployment spell was relatively short (2.2 months in 1980), much of the contribution to the unemployment rate was made by those experiencing long spells. While only 16 per cent of all unemployment spells exceeded three months in 1980, they accounted for 45 per cent of all unemployment. When unemployment spells lasting more than six months are taken into consideration, the corresponding figures are 5 per cent and 21 per cent, respectively. From these results, there emerges the clear impression that a relatively small group of unemployed bears much of the burden of unemployment. Even though some demographic groups may be more prone than others to experience this burden, such concentrations of long-term unemployment exist

Table 1-7

Unemployment Rate, by Age/Sex Group and by Province, Canada, 1977 to First Half 1982

	1977	1978	1979	1980	1981	First half 1982
			(Per cent)			
Canada	8.1	8.4	7.5	7.5	7.6	9.4
Male adults	4.9	5.2	4.5	4.8	4.9	6.6
Female adults	7.4	7.7	7.0	6.5	6.7	7.9
Youths (15-24 yrs.)	14.4	14.5	13.0	13.2	13.3	16.4
Newfoundland	15.6	16.4	15.4	13.5	14.1	15.2
Prince Edward Island	9.9	9.9	11.3	10.8	11.4	12.7
Nova Scotia	10.6	10.6	10.2	9.8	10.2	12.5
New Brunswick	13.2	12.6	11.1	11.1	11.7	13.7
Quebec	10.3	10.9	9.6	9.9	10.4	12.6
Ontario	7.0	7.2	6.5	6.9	6.6	8.0
Manitoba	5.9	6.5	5.4	5.5	6.0	7.1
Saskatchewan	4.5	4.9	4.2	4.4	4.6	5.3
Alberta	4.5	4.7	3.9	3.7	3.8	5.8
British Columbia	8.5	8.3	7.7	6.8	6.7	9.9

SOURCE Data from Statistics Canada

in every group. The long-term unemployed, who are disadvantaged by several factors – especially their minimal education – also appear to be beset by the self-reinforcing nature of their unemployment.

These findings are even more striking when we consider that the published figures underestimate the degree of unemployment by omitting those who withdraw from the labour force as a result of their frustration in not finding a job. The Council study suggests that if discouraged workers were added to the official count, the average level of unemployment in 1980 would jump from 7.5 per cent to between 8.4 and 9.3 per cent. This phenomenon is sensitive to cyclical variations. Thus in March 1982, Statistics Canada recorded that 407,000 persons declared they wanted a job and were available for work at that time. This represents an increase of 20 per cent over the same month a year earlier. Furthermore, 39.5 per cent of these individuals were not looking for work because they believed none was available, an increase of 10 percentage points over last year's figure. Ignoring such a large segment of the population not only underestimates the unemployment burden but also deemphasizes long-term unemployment, because those who withdraw from the labour force would probably otherwise have been recorded among the long-term unemployed.

Productivity

In 1980 and 1981, in spite of an average increase in employment of 2.7 per cent and in the capital stock of 4.5 per cent, real GNE increased, on average, by only 1.8 per cent. Thus real GNE per employed person – a measure of economywide labour productivity – declined by 0.9 per cent per year, on average. A more hopeful sign is that the decline in productivity was concentrated in 1980 and that a turnaround occurred in 1981. Real GNE per employed person actually rose by 0.5 per cent in 1981, in contrast to the 2.2 per cent drop registered in 1980.

Changes in labour productivity can be attributed to changes in the quantities of the other factor inputs used in relation to labour and to changes in total factor productivity, or the efficiency with which all inputs are used. A considerable amount of the deterioration in productivity over the last two years can be attributed to the back-to-back recessions. During recessions firms are reluctant to lay off some of their employees, particularly the more skilled ones. If these employees were laid off, they might not be available when the firms required them again, and substantial recruitment and training costs would therefore have to be incurred. Also, during recessions, larger-than-normal quantities of the capital stock of firms remain idle. Thus the underutilization of both capital and labour leads to diminished labour productivity.

Even more disquieting than the cyclical downturn is the mounting evidence that other factors have been contributing to a decline in the longer-term trend of productivity growth.

Table 1-8 shows the average rate of GNE growth, total employment, the net stock of capital, and GNE

Table 1-8

Average Rate of Growth of
Real GNE, Labour, and Capital, Canada, 1967-81

	GNE	Factors of production: Labour	Factors of production: Capital	GNE per employed person
	(Per cent)			
1967-73	5.4	2.8	5.0	2.5
1974-79	3.1	2.9	4.9	0.3
1980-81	1.8	2.7	4.5	-0.9

SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada.

Table 1-9

Average Rate of Growth of Real Output per Person-Hour, Based on GDP at Factor Cost, Canada, 1967-81

	1967-73	1974-79	1980-81
	(Per cent)		
Commercial nonagricultural industries	3.8	1.3	-1.0
Manufacturing	5.0	2.0	-0.6
Other commercial goods-producing industries	4.6	-0.2	-0.6
Commercial service-producing industries	3.0	1.5	-1.2

SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada.

per employed person for 1967-73, 1974-79 and 1980-81. The first two periods were chosen because they are of similar duration; furthermore, each of the years 1966, 1973 and 1979 corresponds to a business cycle peak. Although employment growth and the increase in the net stock of capital proceeded at roughly the same pace over the first two periods, the average rate of growth in GNE and GNE per employed person fell by more than 2 percentage points. The comparison of figures in Table 1-8 for the two periods tends to indicate that the increase in production from 1974 to 1979 was virtually fully accounted for by the growth of labour and capital inputs and that average annual growth in labour productivity was practically nil. The decline in real GNE per employed person in 1980-81 reflects the impact of the back-to-back recessions as well as an apparent continuation of the slowdown in the trend of productivity growth.

Gross national expenditure per employed person is an aggregate measure that provides no information on productivity performance by sector. However, productivity measures based on gross domestic product at factor cost are available by industrial sector and do shed some light on the source of the productivity slowdown. Table 1-9 presents productivity for the commercial nonagricultural sector, and for its three major subcomponents, covering three periods: 1967-73, 1974-79 and 1980-81.

According to the figures in Table 1-9, the rate of growth of output per person-hour has declined considerably, having dropped from an annual average increase of 3.8 per cent for 1967-73 to only 1.3 per cent for 1974-79. For the last two years, productivity, as measured by output per person-hour, has actually fallen by 1 per cent per year, on average. In large part, this reflects cyclical weakness. This table also reveals that the slowdown in the growth of labour productivity for the commercial nonagricultural sector is not limited to any one of its principal subcomponents; rather, it is common to all three. Between the 1967-73 and 1974-79 periods, the largest decline in productivity growth occurred in the goods producing industries other than manufacturing. Productivity in the crude oil, natural gas and pipeline industry components of the other goods producing industries declined enough to keep the average level of productivity for those industries constant between 1974 and 1979. The decreasing productivity in oil and gas stemmed from both reduced output and from the increasing emphasis on employment in development and exploratory drilling, as well as in nonproduction fields (e.g. professional and administrative).

Another disturbing feature of the slowdown in long-term productivity growth is that even now – a decade since it began – researchers are unable to reach a consensus either on its underlying causes or on appropriate remedies. The energy crisis, inflation, the decline (particularly in the United States) of research and development, all have their champions. Some suggest that the decline is not actually long-term but only cyclical and that when the recession is over, productivity growth will pick up to previous levels.

The External Sector

Recent fluctuations in the value of the Canadian dollar reflect the impact of a range of factors on the psychology of the foreign exchange market. Canada's merchandise trade balance has been remarkably strong this year, but other recent developments in the balance of payments have had a less favourable impact on the exchange market. Foremost among these were the very large borrowings in 1981 to finance the takeover of foreign-owned companies. Canada's short-term indebtedness in particular increased very substantially in 1981, and the need to roll this debt over regularly has left the economy particularly vulnerable to changes in the attitudes and perceptions of foreign lenders.

Canada's current account balance was a source of strength in 1980, but it became a factor in the economy's poor performance throughout 1981 (Table 1-10). The country's traditional surplus on merchandise trade improved by over $4 billion in 1980 to $8.5 billion; in 1981 it was down to $7.4 billion. In 1980, Canadian exporters were still benefiting from the 1977 and 1978 depreciation in the U.S. value of the Canadian dollar and thus from the subsequent improvement in Canada's competitive position. Although economic conditions among Canada's trading partners, especially the United States, were not as favourable in 1980 as in previous years, Canadian producers were in a better position – as a result of the easing in domestic demand pressures – to serve expanding foreign markets. At the same time, the weakening in demand for North American automobiles (a development that took place much earlier in the United States, at least partly as a result of its earlier adjustment to higher world oil prices) led to a significant decline in the volume of imports in 1980.

In 1981 export volume increased, but this was more than offset by the increase in imports and the effects of a substantial deterioration in Canada's merchandise terms of trade. The growth in exports occurred in the first half of the year, when U.S. demand was still strong. Exports declined in the second half in tandem with the weakening of the U.S. economy and especially the sharp drop in U.S. housing and auto demand. Merchandise trade in 1981 was adversely affected as well by the cutbacks in oil production in Alberta prior to the signing of the September agreement with the federal government and by labour disputes in a number of industries, including steel and wood products. During the buoyant first half of 1981, import volume increased by over 4.5 per cent. In the second half of the year, however, imports dropped, and much more substantially than exports. Large declines in the world prices of several commodities exported by Canada led to a deterioration in excess of 3 per cent in Canada's terms of trade over 1981.

The deficit in services continued to more than offset the surplus in merchandise trade in 1980 and 1981, as it did in other years. Interest and dividend payments to nonresident lenders and investors, while increasing in absolute terms in 1980 and 1981, continued to run at about 2.5 per cent of GNP. It was the "other services" category, which includes all interest on bank-related and other short-term foreign assets and liabilities, that registered a large increase in 1981, tending to raise the deficit in services. The substantial improvement in trade performance in 1980 reduced the current account deficit to $1.1 billion – its lowest level since 1973. The combination of a more unfavourable performance for both merchandise and invisibles resulted in a current account deficit of a record $5.3 billion in 1981 (Table 1-10).

The trend to smaller net inflows of long-term capital, which began in 1976, continued in 1980. In that year the demand by nonresidents for outstanding Canadian stocks and bonds grew appreciably,

Table 1-10

Balance of Payments, Canada, 1976-81

	1976	1977	1978	1979	1980	1981
	($ Millions)					
Merchandise trade	1,388	2,730	4,007	4,118	8,488	7,351
Services	-5,760	-7,444	-8,992	-9,744	-10,831	-14,258
Transfers	530	413	50	664	1,247	1,561
Current account balance	-3,842	-4,301	-4,935	-4,962	-1,096	-5,346
Long-term capital	8,007	4,217	3,081	2,099	1,305	1,340
Short-term capital	69	668	1,237	6,752	1,113	14,203
Capital account balance	8,076	4,885	4,318	8,851	2,418	15,543
Net errors and omissions	-3,712	-2,005	-2,682	-2,200	-2,819	-8,981
Allocation of special drawing rights	-	-	-	219	217	210
Net official monetary movements	522	-1,421	-3,299	1,908	-1,280	1,426

SOURCE Data from Statistics Canada.

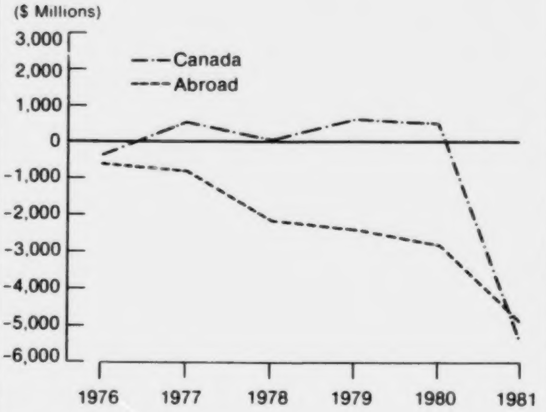
but the increased inflow from this source was more than offset by the decline in federal and provincial borrowings from foreign capital markets and by the outflows associated with the acquisition by Canadians of foreign-owned assets both in this country and abroad. In 1981, net inflows of long-term capital remained at just over $1.3 billion. There was, however, a record inflow of $13.6 billion in 1981 from new issues of Canadian securities, resulting in part from the widening spread between Canadian and foreign interest rates. Net outflows associated with direct investment transactions also rose enormously, increasing from $2.2 billion in 1980 to $10.2 billion in 1981 (Chart 1-8). These outflows resulted from a large number of Canadian takeovers of foreign companies and from a substantial repatriation of Canadian assets, mainly in the energy sector.

There was a record inflow of $14.2 billion in short-term capital during 1981. This was more than double the previous record inflow in 1979. Canadian chartered banks raised a massive $17.9 billion in their foreign currency operations over 1981, which would account for this large short-term inflow. These funds were raised partially to help finance foreign currency loans to Canadian investors who were acquiring foreign-owned firms in Canada. The inflow was also related to Bank Act changes introduced at the end of 1980. Under the revised Bank Act, the foreign currency deposits of residents booked in Canada became subject to reserve requirements in February 1981. Consequently there was a large drop in the holdings of such deposits at chartered banks (over $4 billion in 1981). In order to meet the unusually heavy demand for foreign currency related to takeover activity and also to replace funds lost as a consequence of the Bank Act revisions, the banks borrowed large amounts of U.S. dollars in international money markets.

The substantial increase in "net errors and omissions" to a deficit of almost $9 billion in 1981 is notable. This item is a residual that reflects measurement errors elsewhere in the balance of payments statistics. It is usually thought to represent unrecorded short-term capital flows. In 1981 the unusually large outflows implicit in the errors and omissions could be related to highly volatile financial markets as well as to Bank Act revisions that gave rise to some offsetting outflows of short-term capital not identified elsewhere in the accounts. In any event, the very high 1981 value of errors and omissions indicates that the statistics are more subject to revision than usual. This suggests that any interpretations of the balance of payments position must be regarded as tentative.

Chart 1-8

Canadian Direct Investment Abroad and Foreign Direct Investment in Canada, 1976-81



SOURCE Data from Statistics Canada

The basic balance, consisting of the total of the current and long-term capital accounts of the balance of payments, which was in deficit by an average of $2.4 billion in 1978 and 1979, recorded a surplus of $0.2 billion in 1980 but a deficit of $4 billion in 1981.

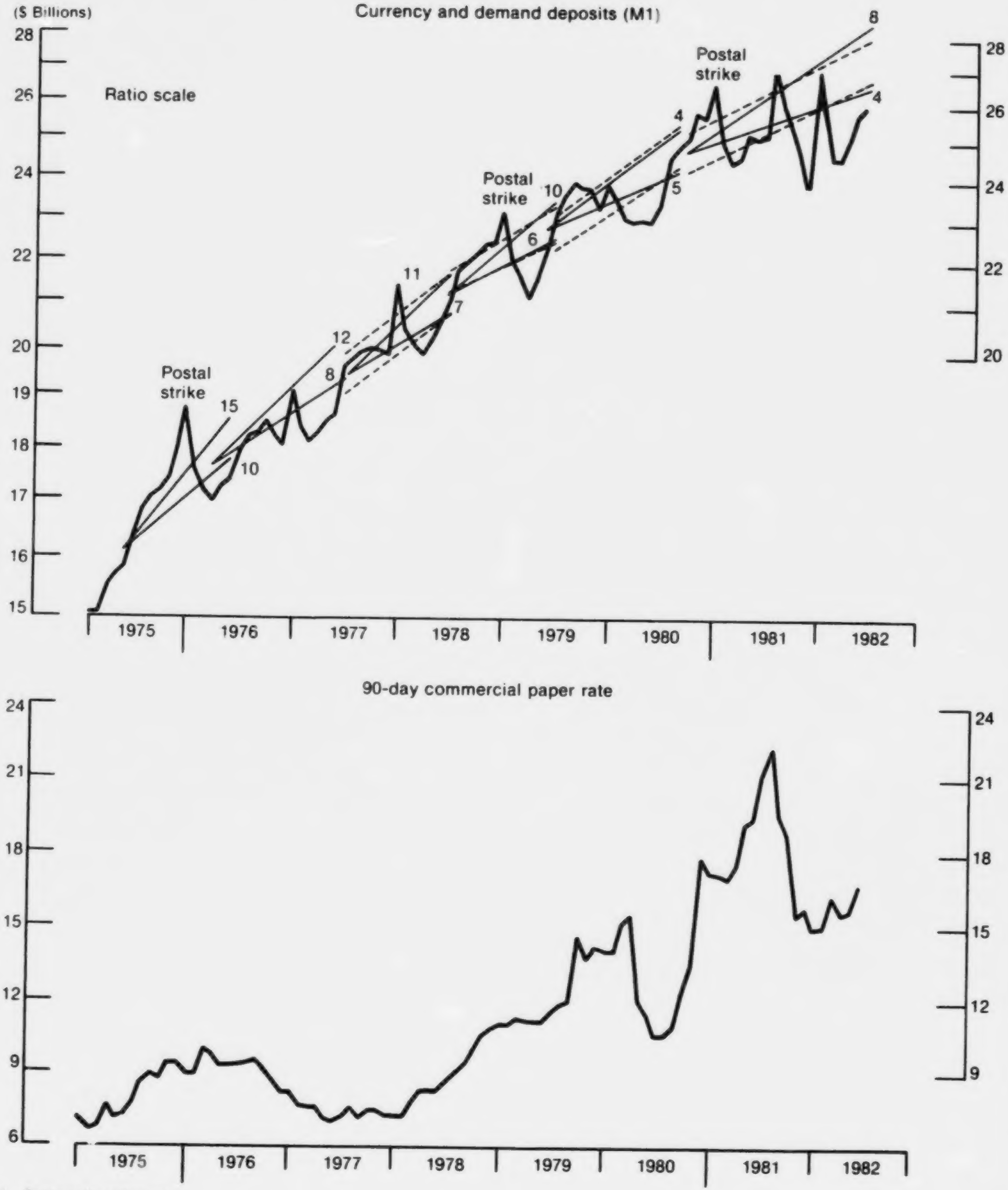
During the present year, although the foreign exchange market has been beset by considerable uncertainty, the merchandise trade balance and the current account generally have shown remarkable strength. At $8.2 billion the trade surplus for the first half of 1982 was running well ahead of the record set in 1980. While the improvement can be traced to a substantial drop in imports – notably imports of capital goods – and to the weakness of economic activity in Canada relative to that in the United States, it is still significant. The strength of the external sector has helped to forestall a much greater decline in real output.

Monetary Policy

Since 1975, the Bank of Canada has pursued a monetary policy based on establishing target ranges for the rate of growth of currency and demand deposits, or M1. During this period the target range has been successively lowered from 10-15 per cent to 4-8 per cent (Chart 1-9). By and large, the Bank has been quite successful in staying within the target range; nevertheless, inflation has refused to yield to monetary restraint.

Chart 1-9

Money Supply,[1] Target Growth Rates, and Short-Term Interest Rates, Canada, 1975 to First Half 1982



Currency and demand deposits (M1)

90-day commercial paper rate

1 Seasonally adjusted.

SOURCE *Bank of Canada Review*, various issues.

Inflation was not accommodated by monetary policy. The money supply increased much less quickly than nominal income from 1975 to 1981. Money supply, as measured by currency and demand deposits, grew, on average, by more than 7 per cent; gross national product rose, on average, by more than 12 per cent. The difference between these two represents the increase in the velocity or turnover of money, which averaged about 4.5 per cent per year over this period.

In the face of the strong pressure on prices from domestic and international forces it would have been a formidable task indeed for monetary policy to keep the lid on inflation, let alone bring it down. Monetary policy would have had to be tightened much more abruptly than would have been consistent with the announced strategy of gradualism. If abruptness had been the order of the day, real output would no doubt have been weaker and unemployment higher. These costs would certainly have weighed heavily in the balance.

With the benefit of hindsight, the case can be made that monetary policy might have been more uniformly restrictive than it actually turned out to be. The Governor of the Bank of Canada has acknowledged this himself on a number of occasions. In his 1980 Annual Report he said: "It appears in retrospect that monetary policy would have been better if there had been a more rapid reduction of M1 growth rates during 1975 to 1977."[1] He also observed in his 1981 Annual Report that "Monetary policy proved to be more gradualist than it was intended to be."[2]

A year in which monetary policy may have been unduly easy was 1977. In four steps in late 1976 and early 1977 the Bank rate was lowered by 2 percentage points to 7.5 per cent. This left short-term interest rates scarcely above the rate of inflation. Interest rate reductions were undertaken to get the money supply back into the target range, from which it had fallen. As it turned out, these reductions may not have been appropriate under the circumstances. Later evidence suggests that the slow growth of money did not result from a faltering economy but rather from a downward shift in money demand as a result of greater use by corporations of the improved cash management facilities then becoming available.

Monetary policy has been conducted with a close eye on the exchange rate. During 1978 many of the Bank's policy actions were justified in terms of exchange rate objectives. Nevertheless, the Bank continued to pursue its longer-term policy of restraining the growth of the money supply to within its target range.

The conduct of monetary policy in Canada was made more difficult by the decision of the Federal Reserve Board in October 1979 to switch from interest rate control of monetary aggregates to base control. In practice, this represented a tightening of U.S. monetary policy. It was the Federal Reserve's response to intensified inflationary pressures. At this time the Bank of Canada was also concerned that the Canadian economy was becoming overheated, with demand pushing on capacity in some sectors. A strategy of base control entailed a willingness by the Federal Reserve to tolerate a much greater degree of interest rate volatility than had hitherto been the case. The problems this was to pose for Canadian monetary policy soon became painfully evident.

Interest rates in the United States quickly took off from the October 1979 levels, with the 30-day commercial paper rates peaking at over 18 per cent in April 1980. At that time inflationary expectations were running at a very high level in the United States, with the inflation rate verging on an annual rate of 20 per cent. The interest rate on 30-day commercial paper plunged to about 8 per cent in May and June before soaring again to the vicinity of 22 per cent in December. This was followed by yet another drop to 14 per cent in March 1981 and a rise back up to 18 per cent in June. Short-term interest rates have since eased off significantly.

In an effort to dampen fluctuations in the external value of the Canadian dollar, the Bank of Canada was left with little choice but to let Canadian interest rates follow those in the United States. However, this was done in such a way as to trade off changes in the exchange rate against changes in interest rates so as to minimize disruptions to the Canadian economy.

The Bank rate was floated in March 1980 and set weekly at 25 basis points above the average three-month treasury bill tender. This move was taken to give the Bank greater flexibility in coping with the enhanced volatility of U.S. interest rates associated with base control. Negative interest rate differentials of around 400 basis points were allowed to open up in the spring of 1980 to keep Canadian interest rates from rising as high as U.S. rates. This contributed to a fall in the Canadian dollar from 87.5 cents (U.S.) to 83.5 cents. When U.S. interest rates subsequently dropped in late spring, Canadian interest rates were not permitted to fall as quickly. Thus the negative interest rate differential was reversed, and the Canadian dollar climbed back up.

In late summer 1980 and through the fall, as U.S. rates moved up, Canadian rates followed, but more slowly. Consequently, a negative differential again opened up, and the Canadian dollar sagged. When U.S. rates plummeted from the December 1980 high to the March 1981 low, the interest rate differential once again switched around. The Canadian dollar did not fully regain its lost ground, however. Serving to restrain the Canadian dollar and eventually depress it were large net direct investment outflows. A wave of takeovers of foreign-owned firms, amounting to some $7.5 billion, swept across the Canadian economy. A large proportion of these takeovers were of oil and gas companies and were consistent with the Canadianization thrust of the National Energy Program. The higher Petroleum Incentive Program grants for Canadian-owned companies provided a generous financial incentive for acquisitions. There was also the takeover of Petrofina by Petro-Canada, with funds from the Canadian Ownership Account. In addition to buying foreign-owned companies operating in Canada, Canadians also spent some $5 billion in acquiring foreign-owned companies outside the country. Some of the capital outflows could be attributed to the uncertainty created by the National Energy Program and the dispute with Alberta; others, to the market's appraisal of diverging inflation prospects in Canada and the United States.

When U.S. interest rates reached a plateau in May 1981, the Canadian dollar continued to weaken, the decline gathering momentum as capital outflows mounted. In late July and early August a crisis gripped the foreign exchange market. The Canadian dollar fell 3 per cent against the U.S. dollar in as many weeks. The crisis dissipated only when the Bank of Canada stepped in firmly to restore confidence in the currency. Short-term interest rates had to be jacked up to the stratospheric level of 23 per cent before the run on the dollar was halted. The impact of such high interest rates on the economy was felt for many months thereafter.

After the exchange crisis passed and the dollar firmed up, interest rates were allowed to follow U.S. rates down to more normal levels. After touching bottom at around 12 per cent, U.S. rates started to rise again. Canadian rates continued to fall, bottoming out at about 15 per cent. The Canada-U.S. interest differential went from a high of 600 basis points to virtually zero.

Through most of 1981, exchange rate objectives dominated monetary policy, not primarily for their own sake, but because depreciation of the Canadian dollar has pervasive inflationary implications for the economy. The prices of imported goods are increased roughly in proportion to any depreciation. Domestically produced goods that are substitutable for imports or that can be exported will also rise in price. Finally, there is the danger that the higher prices resulting from the depreciation will be built into the cost structure through wage demands and thus launch a self-defeating inflationary spiral.

It became increasingly difficult over the course of 1981 to interpret the significance of monetary growth relative to the target range. During the summer, the money supply was buoyed by a postal strike. In August, following the termination of the strike, the money supply dropped out of the bottom of the 4 to 8 per cent target growth range and continued to fall until November before turning back toward it. To a certain extent, this probably reflects the lagged adjustment to the extremely high interest rates prevailing in late summer and early fall. Such extreme volatility in interest rates, however, makes it harder to get a reading on the underlying money growth trends. There is also some evidence of a downward shift in M1 demand resulting from a continuation of the switch from personal chequing accounts, which are included in M1, to daily interest savings, which are not, and from the spread of cash management procedures to small and medium-sized businesses. Another complicating factor in assessing monetary trends was the introduction of a new reporting system for banks last November. For a time, apparently, M1 was underestimated because of the difficulty of measuring float (i.e. cheques deposited in payees' accounts but not yet debited to issuers' accounts).

In any event, in late 1981 and early 1982 the Bank did not seek to lower interest rates sufficiently to push the money supply back into the middle of the target range. A cautious approach was pursued to allow the interest rate declines that had already occurred sufficient time to buoy money demands by their full equilibrium amounts and to take into account shifts in money demand and measurement problems. Indeed, interest rates were allowed to creep up somewhat as U.S. interest rates rose from their late-1981 lows. This was done to provide support for a depreciating Canadian dollar.

A more aggressive approach to lowering interest rates might have risked overshooting the growth targets or jeopardized the hard-won improvements on the inflation front by triggering an even greater depreciation of the Canadian dollar than actually occurred. The Canadian dollar did not start to firm up until this July.

In gauging the appropriate level for interest rates, the Bank has examined the relationship between interest rates and inflation. The Governor of the Bank told the Montreal Chamber of Commerce last December that "interest rates are no longer extremely high when set against the current very high rate of inflation in Canada."[3] He reiterated this point in his *Annual Report 1981*.[4]

Fiscal Policy

The setting of fiscal policy has been less singlemindedly devoted to gearing down inflation than has monetary policy. While expenditure restraint was one of the four elements of the Anti-Inflation Program set out in 1975, the government introduced, starting in November 1974, a series of expansionary budgets containing major tax reductions. These budgets transformed a national accounts surplus of over $1 billion in 1974 into a deficit of almost $10.7 billion in 1978. This was a substantial dose of fiscal stimulus, which helped to sustain output and employment growth over the same period.

The contribution of fiscal policy in the struggle against inflation came from expenditure restraint. As part of the Anti-Inflation Program, the government committed itself to restrain the trend growth of its spending to less than the trend of GNP. (Note that this commitment was made with respect to outlays on a public accounts basis, not national accounts expenditures, and with respect to trend growth.) That this commitment was met is demonstrated by the decline in federal government expenditures on a national accounts basis from 21.5 per cent of GNP in 1975 to 19.8 per cent in 1979.

The share of federal government spending in GNP rose to 20.5 per cent in 1980 and to 21.3 per cent in 1981. This did not indicate an end to the government's policy of expenditure restraint; rather, it resulted from the ballooning of petroleum compensation payments for imported oil, on the heels of the 1979 OPEC oil price hike, and from a jump in public debt charges in 1981 caused by the run-up in interest rates.

The increase in the GNP share of federal government spending is less pronounced on a public accounts basis. This is because revenues from the Petroleum Compensation Charge are netted against Petroleum Compensation Payments in the public accounts, thus reducing total outlays. In the national accounts, Petroleum Compensation Payments are recorded gross.

Federal government fiscal policy was launched on a more restrictive course in the October 1980 budget. At that time the government adopted an express policy of deficit reduction. Fiscal policy was to be aligned more closely with monetary policy in the battle against inflation.

The deficit was to be reduced by restraining spending and by transferring the burden of the oil import subsidy to consumers. As it turned out, the deficit on a national accounts basis actually did decline from $10.2 billion in 1980 to $8 billion in 1981. A significant proportion of the spending on new energy initiatives budgeted for fiscal 1981/82 did not occur in calendar year 1981. This temporarily reduced the deficit more than would have been the case that year. When the spending actually occurs in 1982, the deficit will be increased correspondingly.

The fiscal position of provincial governments has continued to improve. The large overall $1.8 billion deficit recorded in 1975 as a result of weak economic activity and discretionary tax cuts was transformed into a $2 billion surplus in 1981 by rising energy revenues in the three westernmost provinces. But despite the overall improvement, the deficits of other provinces remained large.

Reflecting the underlying shifts in the federal and provincial fiscal position, the total government sector swung from a surplus of 1.9 per cent of GNP in 1974 to a deficit of 2.4 per cent of GNP in 1975. The largest deficit relative to the economy was 3.1 per cent of GNP in 1978. By 1981 the total government sector deficit had declined to 1.2 per cent of GNP. The fiscal stimulus injected to counter the 1974-75 recessions was largely unwound by 1981.

If one looks solely at the federal sector one can readily see the acute worsening in the fiscal position caused by the recession. Due to the decline in production, employment and income, coupled with lower international oil prices and lower energy taxes, the federal government has estimated its budgetary revenue for the 1982/83 fiscal year at $58.6 billion. On the other hand, its estimated budgetary expenditures for 1982/83 are $78.1 billion. The larger than anticipated expenditures are primarily due to the automatic response of Canada's tax and expenditure systems to the recession coupled with the impact on revenues from the higher interest rates, deferral of some large energy projects, unemployment support programs, etc. The overall result is that the federal government is facing a budgetary deficit of $19.6 billion for the current fiscal year.

In interpreting the recent budgetary trends it is useful to consider the implications of cyclical developments and the decline in the real value of outstanding government debt on the budget deficit as an indicator of fiscal stance. The Department of Finance publishes in its *Economic Review* an estimate of the cyclically adjusted budget balance for both the federal government and the total government sector. This shows what the budget balance would be if the economy were operating at an average or cyclically adjusted level of activity. In 1981 the federal deficit on this basis would have been 0.9 per cent of GNP, or

1.4 percentage points lower than its actual value of 2.3 per cent of GNP; the total government sector on this basis would have recorded a surplus of 1.2 per cent of GNP rather than a deficit of 0.7 per cent of GNP.

The Council has calculated the impact of inflation on the real value of outstanding government debt. In 1981 this value at the federal level declined by 2.5 per cent of GNP because of inflation, and the total government sector debt declined by 3.1 per cent of GNP. The erosion of the real value of government debt would cause the deficit to be overstated during a period of inflation. Taking into account the impact of cyclical conditions and inflation on the deficit as an indicator of fiscal policy, the tightening of fiscal policy has been much more pronounced than would be suggested by a simple reading of the deficit.

Conclusion

Canada has entered the 1980s in difficult economic straits. Unemployment and inflation have worsened and both have become issues of grave concern. The investment climate is beset by new uncertainties, corporate profitability is unusually depressed, and idle capacity abounds. There is thus no reason to expect business capital spending to be the engine of growth that many had anticipated. Wage settlements are high and self-fulfilling. Workers as well as others in the economy have adjusted their behaviour to the expectation of continued high levels of inflation. Superimposed on these current problems – though not totally unrelated to them – are longer-term concerns with respect to Canada's poor productivity performance and the deterioration in this country's international competitiveness.

2 Medium-Term Prospects

The North American economy is just beginning to recover from the sharpest downturn in real economic activity since the 1957-58 recession, and Canada has not been able to isolate itself from this period of poor performance. The recession of 1981-82 follows a period characterized by sporadic and reduced real growth, high unemployment rates, persistent double-digit inflation, reduced growth in productivity, a weak current account balance of payments, lower growth in real wages, and a large and persistent federal government deficit.

The medium-run outlook for Canada will be influenced by the pattern of the U.S. recovery in 1983 and 1984. However, some of Canada's economic problems are of its own making; thus there are areas where poor Canadian performance could continue if these problems remain unsolved. For example, a strong U.S. recovery would lead to only modest improvements in Canada's current account balance of payments, the unemployment rate and federal deficit; it would not lead to quick restoration in the growth of productivity and of real wages to the levels of the 1960s and early 1970s. Furthermore, inflation, now running below the double-digit level in the United States, has so far been less responsive to slack in labour and product markets in Canada. There is still upward pressure on the Canadian inflation rate from energy prices because of scheduled price increases associated with the National Energy Program. But these increases alone cannot explain the persistence of the high Canadian inflation rate.

Changes in Canada's economic prospects during the last 12 months emphasize the uncertainty of any economic projection. However, periodically it is useful to focus attention on current information about the future course of events, on the present position of the economy and on its past performance, in order to develop an up-to-date view of the future.

Highlights of the Base Case

The North American recession, the weakness in world oil prices, the delay and cancellation of many energy megaprojects and the possibility that the personal sector will continue to save a substantial proportion of current income – as protection against the erosion of the real value of its asset base from inflation and in response to high real rates of return as measured by the difference between nominal interest rates and the inflation rate – have substantially altered our perception of the medium term.

It is necessary to suggest alternatives along which medium-term prospects may unfold because of the unusual degree of uncertainty about such key factors as the strength and persistence of exceptionally high personal savings rates in Canada, the impact of wage and price restraint, the risks in the development of Canadian energy supplies, and uncertainties associated with the strength of the U.S. recovery.

A base case plus a more favourable and a less favourable projection are presented, along with the individual basis on which each of these could develop. The cases share a common set of assumptions; in particular, they are based on an unchanged policy stance. However, an unchanged policy stance is not what is recommended in this Review, because even the most favourable of the alternatives has some unsatisfactory features, including the slowing of the growth of potential, the widening of the gap between actual and potential, and the high rates of unemployment. The projections also reflect continuing structural weaknesses in the Canadian economy. What may be done about these unsatisfactory prospects is discussed later in the Review.

The base case discussed below is built on a set of working assumptions related to the external environment (including international oil prices), fiscal policy, monetary policy and domestic energy policy. A summary of the base case projection is recorded in Table 2-1.

- Although slight improvement will occur during the second half of 1982, the strength and timing of the Canadian recovery will not be sufficient to ensure that 1982 as a whole will show improvement in real terms over the level of GNE for 1981. In fact, because of very poor performance during the first six months

Table 2-1

Selected Economic Indicators, Canada, 1982-87 (Base Case Projection)

	1982	1983	1984	1985	1986	1987
(Percentage change)						
Gross national expenditure ($1971)	-2.4	1.6	4.1	3.4	2.2	3.0
Consumer price index	11.4	8.8	7.8	7.2	7.0	7.3
Labour force	--	2.3	2.3	2.1	1.9	1.8
Employment	-3.0	2.4	2.4	2.3	1.8	1.9
Productivity[1]	1.5	-0.9	1.7	1.3	0.6	1.1
Real wage rate	1.4	0.3	0.8	1.0	0.9	0.6
Nominal wage rate	13.0	9.2	8.6	8.3	8.0	8.0
(Per cent)						
Participation rate[2]	62.4	62.8	63.4	63.9	64.3	64.7
Savings rate[3]	13.1	12.9	11.6	11.1	11.4	11.3
Unemployment rate	10.5	10.4	10.3	10.2	10.2	10.1
(Percentage of GNE)						
Real investment	22.8	22.1	22.2	22.9	23.7	24.3
Federal surplus or deficit (-)	-5.0	-5.0	-5.2	-5.1	-5.1	-5.0
Provincial surplus or deficit (-)	-0.5	-0.5	-0.2	0.2	0.6	1.1
Balance of international payments						
Current account	-1.3	-1.0	-1.8	-2.0	-1.8	-1.7
Energy	1.6	2.0	2.1	2.3	2.6	2.9
Nonenergy	-2.9	-3.0	-3.9	-4.2	-4.4	-4.5

[1] Output per person-hour.

[2] Labour force as a proportion of the population aged 15 and over.

[3] Personal saving as a proportion of personal disposable income.

SOURCE Economic Council of Canada, CANDIDE 2.0 model, July 1982.

of 1982, we expect real GNE to decline by 2.4 per cent for the year as a whole. Canadian economic growth will average 2.8 per cent during 1983-84, just barely in line with potential growth. During the period 1985-87 Canadian real growth will also average 2.8 per cent.

- In 1982 real economic performance for the Canadian economy will be substantially below potential. One indication of this performance is the anticipated average unemployment rate of 10.5 per cent for the year as a whole. Furthermore, because the recovery in 1983-85 from the 1981-82 recession will not be accompanied by real growth in excess of potential growth, we anticipate that the gap between actual performance and potential, which widened substantially in 1982, will show little improvement in the medium run. As a result, the unemployment rate could also average just above 10 per cent in the medium term.

- The rate of inflation, as measured by the consumer price index, will average 11.4 per cent in 1982. During the period 1983-85 the Canadian inflation rate will average 7.9 per cent. By mid-decade inflation should be near 7.2 per cent. Less pressure from energy prices, continued slack in labour and product markets, favourable external price developments and a mild cyclical recovery in productivity should reinforce the downward trend. However, we anticipate that during the early part of the decade, the Canadian inflation rate will continue to average about 1.5 percentage points above the U.S. rate.

- In 1982 very little growth in the labour force will occur, reflecting the intensity of the discouraged worker effect prevalent in the current recessionary period. Furthermore, employment prospects in Canada during the recovery period will just keep pace with labour force growth. By mid-decade job opportunities will expand, absorbing new entrants into the labour force but not at a rate that would imply a substantial fall in the rate of unemployment.

- In the medium run the growth of productivity and real wages will increase at a rate slightly lower than 1 per cent per year, considerably reduced from the outcome in the late 1960s and early 1970s. Although there will be some cyclical recovery in the growth of these two key indicators by mid-decade, growth will remain substantially below past performance.

- During the current recession the personal savings rate increased to a level slightly above 13 per cent. Prior to this period the personal savings rate in Canada was about 10 per cent. With the anticipated recovery we expect a fall in the personal savings rate of between 1 and 2 percentage points as consumers move back into the market for durables and semidurables. However, high rates of inflation, accompanied by a substantial positive differential between nominal interest rates and the rate of inflation, could keep the personal savings rate from falling below 11 per cent in the medium run.

- We anticipate real investment as a percentage of GNE to decline during the period 1982-84. High financing costs, low after-tax earnings and weak balance sheets, accompanied by delays in and cancellations of large energy projects and an unsettled housing market, will result in considerable weakness in investment spending. We anticipate an increase in the ratio of real investment to real GNE from a low of 22.1 per cent in 1983 to a high of 24.3 per cent in 1987.

- The federal deficit as a percentage of GNE will remain large and will persist to mid-decade. The sharp downturn in 1981-82 has led to a short-term erosion of the tax base, and the continued poor performance of the Canadian economy relative to potential will contribute to reduced growth in all forms of tax revenue. The weakness in world oil prices has led to substantially lower revenues than were originally anticipated from the National Energy Program and the subsequent Ottawa/Alberta agreement. At the same time, expenditures associated with automatic stabilization programs have increased. With continued growth in the stock of federal debt, pressure on the federal deficit in the medium term will also come from debt servicing charges.

- During this period of slow growth, the balance of international payments will strengthen slightly when viewed as a percentage of GNE. In the medium run the energy balance will strengthen, partly through increased natural gas exports after mid-decade. By mid-decade the nonenergy current account balance of payments will again show weakness, stemming both from the recovery in demand and the erosion of competitiveness resulting from the inflation rate in Canada which, as noted above, is expected to be about 1.5 percentage points higher on average than that of the United States during the early part of the decade.

The External Environment Outlook

Canada is less isolated from the ups and downs of the North American economy than it has been in the past. The weakening of economic conditions in the United States in the last half of 1981 and the continued weakness in early 1982 in U.S. residential construction, business fixed investment and consumer purchases of automobiles will have a significant impact on Canadian economic performance in the near term.

The North American recession of 1981-82 is characterized by a decline of 0.8 per cent in U.S. real GNP for 1982 (Table 2-2). The anticipated rates of growth associated with the U.S. recovery in 1983 and 1984 average 3.8 per cent, with 1983 a little stronger than 1984. During the period 1985-87 we anticipate the U.S. economy will average 3 per cent real growth with a pause in 1986, caused partly by the deregulation of natural gas prices scheduled to occur at mid-decade. The anticipated recovery in U.S. economic activity is not spectacular. The back-to-back recessions of 1980 and 1981-82 have left the U.S. economy performing substantially below potential. In contrast to this, after the first oil price shock in 1973, U.S. real GNP recovered substantially in 1975-76 to a growth rate near 6 per cent in real terms.

The present outlook for the U.S. economy incorporates the Reagan Administration's tax cuts as passed by Congress. Among other things these include the accelerated depreciation program, which implies a 48 per cent reduction in average tax lives, 10 per cent personal tax cuts in 1983 and 1984, and the indexation of personal tax brackets in 1985 designed to prevent "bracket creep." We have not assumed that President Reagan's new expenditure initiatives will be enacted as proposed, nor have we incorporated the recently enacted $98 billion package of tax increases. We have assumed lower rates of growth for real increases in defence outlays during the period 1983-86 than proposed by the Reagan Administration (in the neighbourhood of 6 per cent rather than 8.5 per cent).

The Reagan tax and expenditure program is anticipated to build up substantial U.S. deficits. For example, in 1983-84 the U.S. deficit is expected to range between $100 and $125 billion. How financial markets react to and eventually finance these deficits will influence the shape of the U.S. recovery and subsequently affect Canadian economic activity through the strength of our export markets and through the impact that U.S. interest rates have on Canadian credit and foreign exchange markets. However, we expect that these large deficits will not put too much pressure on U.S. interest rates. In fact the U.S. short rate falls from an average of 14.2 per cent in 1982 to an average of 12.8 per cent in 1983.

Although U.S. nominal rates will fall in 1982-83, real rates will remain high during this early period. These continued high real rates account for the weakness of the U.S. recovery (compared with

Table 2-2

External Environment Assumptions, 1982-87 (Base Case Projection)

	1982	1983	1984	1985	1986	1987
			(Percentage change)			
Industrial production						
OECD countries	0.6	5.2	4.0	4.6	3.2	3.7
Selected countries[1]	1.5	5.3	4.0	3.2	3.5	3.8
International price of crude petroleum (f.o.b., $Cdn.)	-0.3	1.9	8.7	9.2	9.3	9.2
United States						
Real gross national expenditure	-0.8	4.0	3.6	3.9	1.9	3.2
Industrial production	0.1	5.2	4.0	5.2	3.1	3.6
Consumer price index	5.1	6.7	7.4	8.1	7.9	6.9
			(Per cent)			
Unemployment rate	9.2	8.2	7.8	6.9	6.9	6.9
Short-term interest rate[2]	14.2	12.8	11.4	11.0	10.5	10.3

1 France, Italy, West Germany, the United Kingdom, and Japan.
2 Short-term prime commercial paper.
SOURCE Economic Council of Canada, CANDIDE 2.0 model, July 1982.

previous recovery periods), and this weakness is a factor in Canadian economic performance during 1983-84. The continued performance of the U.S. economy below potential in the medium to long term is also a factor in poor medium-term Canadian economic performance. For example, unemployment rates in the United States in 1982 are expected to average 9.2 per cent. Although there will be some improvement in the U.S. unemployment rate, we anticipate it will not fall below 8 per cent until early 1984.

The one bright spot in U.S. economic performance is the reduction in inflation that we anticipate during the recovery period. Tight monetary policy and weakness in both product and factor markets have led to substantial declines in inflation in the United States. On the wage front there have already been many concessions. Average wage demands are expected to continue around 7 per cent during the projection period. The reduced rate of inflation in the United States in the long run will be a challenge that Canadians must recognize. Inflation in Canada is anticipated to average 7.9 per cent during the early part of the decade, while U.S. inflation is expected to average between 6 and 7 per cent. By mid-decade this could leave Canada less competitive on world markets than its largest trading partner.

More so than the United States, Canada will continue to experience high real short-term interest rates in the medium run. In 1982 real rates in the United States are anticipated to be above 8 per cent, dropping to near 6 per cent in 1983. By late decade we expect real rates to decline to around 3 per cent. We anticipate not only a 200 to 300 basis point differential between Canadian and U.S. interest rates but also rates of interest in Canada that remain substantially above the domestic rate of inflation. In fact, during the latter half of the decade U.S. short-term rates are expected to average near 10 per cent, Canadian short-term rates near 13 per cent, and the Canadian rate of inflation near 7 per cent.

Most OECD countries (primarily those in Western Europe and Japan) are expected to fare somewhat better than the United States in 1982. During the period 1982-87 we anticipate growth of industrial production for these countries to average between 3 and 5 per cent per year, but this performance is considerably lower than the high growth rates recorded during the 1960s and early 1970s.

Energy Supply, Demand and Price

Recently the world oil market softened, resulting in a decline in the nominal price of crude petroleum. During the period 1981-83 increases in crude petroleum prices on world markets are not anticipated to exceed the rate of inflation in either Canada or the United States. In fact, in 1982 we anticipate a 0.3 per cent decline in the nominal price of crude petroleum on world markets and in 1983 a 1.9 per cent nominal increase. After this we expect the price of crude petroleum on world markets to grow 2 percentage points more than the U.S. rate of inflation (GNP deflator). By 1985 we expect the international price at Montreal, in Canadian dollars, to be approximately $51 a barrel (Table 2-3), compared with $42 a barrel in 1982.

These updated estimates of the world price of oil are substantially lower than those used in the Seventeenth and Eighteenth Annual Reviews. They have major implications for the domestic price of crude petroleum and for the anticipated revenues from the tax measures associated with the National Energy Program, the subsequent agreement between Ottawa and Alberta (September 1981) and the NEP *Update* (May 1982). Implied is reduced pressure on Canadian inflation rates from domestic oil prices and a reduction in the revenues available to governments and producers.

The implications that these lower world prices have for domestic energy pricing, taxation and energy expenditures are incorporated in the base case projection. For example, from 1983 to 1986 the average increment in wellhead prices, as scheduled in the September 1981 agreement, was $8 per barrel per year. But the wellhead price of old oil plus the cost of transporting it to Montreal, according to the September 1981 agreement, cannot exceed 75 per cent of the international price at Montreal. Because of the weakness in world oil prices in 1982-83, this 75 per cent cap will be reached in 1983. As a result, during the period 1984 through 1987, unless the 75 per cent cap is removed, wellhead prices will increase at a rate that is less than half of the original $8 per year increment established in NEP and subsequent agreements.

The reduced growth rate of domestic oil prices influences the Canadian economic outlook in two important ways. Upward pressure on general prices is reduced – but at the same time, so are oil revenues. Consumers will benefit from lower prices, but both producers and governments will suffer a lower rate of increase in revenues once the 75 per cent cap is reached.

The base case projection also includes refinery levies added to the wellhead price of domestic crude petroleum produced from established reserves. The revenue from these levies balances the subsidy on oil imports and new oil production as defined in the NEP and the September 1981 agreement. The domestic price at Toronto in 1982 averaged about $31 per barrel, while the wellhead price for conventional old oil averaged about $24, the difference being refinery levies and transportation costs.

In addition to assumptions related to oil prices, the base case projection includes specific assumptions about wellhead and city gate prices for natural gas. The pricing schedule for natural gas includes both increases at the wellhead and a tax on domestic consumption, which was initially set at 30 cents per thousand cubic feet (mcf). The NEP imposed the same levy on exports of natural gas, but the rate on exports was set at zero by the federal government in the September 1981 Ottawa/Alberta agreement. During the projection period this tax was to increase at a rate implying that in the medium term the domestic price of natural gas would not differ from 65 per cent of the blended crude petroleum price (btu equivalent). Low growth in the international price of crude petroleum implies a domestic blended price that may leave little room for the natural gas tax. As a result, revenues from this source could be reduced or fall to zero. There are other areas of taxation, including the Petroleum and Gas Revenue Tax and the

Table 2-3

Components of the Domestic Crude Petroleum Price to Consumers, 1982-87 (Base Case Projection)

	1982	1983	1984	1985	1986	1987
			(Dollars per barrel)			
Domestic price at Toronto	31.24	36.55	40.31	44.66	49.30	54.34
Canadian ownership charge[1]	1.15	0.48	–	–	–	–
Petroleum compensation charge[2]	4.37	3.66	5.16	6.35	7.52	8.81
Transportation charge[3]	1.09	1.14	1.19	1.25	1.31	1.37
Wellhead price for conventional old oil	24.63	31.27	33.96	37.06	40.47	44.16
International price at Montreal	42.39	43.21	46.87	51.07	55.71	60.71
Ratio of wellhead price to international price	0.581	0.724	0.725	0.726	0.726	0.727

1 Assessed at $1.15 per barrel for 25-month period from May 1981 to May 1983.
2 The petroleum compensation charge reflects a gradual supply shift to "new" oil, as well as a softening of world prices early in the period.
3 To Toronto only.
SOURCE Economic Council of Canada, CANDIDE 2.0 model, July 1982.

Table 2-4

The Phasing of Large-Scale Energy Investment Projects, 1982-92 (Base Case Projection)

	Phase-in year	Peak period	Phase-out year
Oil sands			
Syncrude extension		(Project excluded)	
Alsands		(Project excluded)	
Cold Lake	1991	(Beyond projection period)	
Canstar	1985	1987-88	1991
Pipelines			
TQM Pipeline	1981	1982-83	1987
Alaska Highway Gas Pipeline	1985	1986-87	1990
East Coast Gas Pipeline	1988	1989-90	1992
Hibernia Oil Project	1985	1986-87	1988

SOURCE Economic Council of Canada, CANDIDE 2.0 model, July 1982.

Incremental Oil Revenue Tax, that are influenced by the world price of crude petroleum. The revenues associated with these tax programs have been projected to be consistent with the soft international pricing environment.

The success of the off-oil conversion objective of the NEP depends on the rate at which natural gas and electricity are substituted for oil in the commercial and industrial sectors of the economy and on the rate at which the production of crude petroleum from nonconventional sources will increase during the second half of the decade. Even though we have included in our set of assumptions the consumer and producer incentives to encourage conversion from oil to natural gas and electricity and to encourage increased exploration and production of oil from nonconventional sources, our assumptions differ somewhat from those of the National Energy Program.

For example, the NEP target for the annual decline in domestic consumption of oil during the 1980s was set at 2.6 per cent, eliminating the need for imported crude petroleum (excluding swap imports from the United States) by 1990. The base case assumptions imply a reduction in demand of only 1.2 per cent as an annual average which, when combined with the revised oil supply assumptions released in September 1981 by the National Energy Board, suggests that imported crude petroleum will still account for about 10 per cent of domestic consumption by the end of the decade.

The estimates of supply in the base case projection are tied to the timing of energy megaprojects. Recently the schedule of some of these megaprojects has changed, while others have been canceled (Table 2-4). For example, the Alsands project and the extended portion of the Syncrude project are now excluded from our assumption set. We have also excluded the Cold Lake *in situ* plant from our base case projections, deferring it until early 1990. We have not altered the timing of the Trans Quebec & Maritimes (TQM) Pipeline or the East Coast Gas Pipeline but have deferred the Alaska Highway Gas Pipeline. We have also included development expenditures on the Hibernia Oil project.

Fiscal and Monetary Policy in the Base Case Projection

The fiscal measures associated with the November 1981 federal budget, the most recent fiscal measures associated with established program financing and the measures announced in the June 1982 federal budget have been included in the base case projection (Table 2-5). Expenditure restraint has been imposed on our assumption set by providing for growth in federal wage rates of 6 per cent in 1983 and 5 per cent in 1984 after a phase-in period in 1982. We have also imposed constraints on the provincial, municipal and health care sectors that imply no gains in real wages in these sectors. And restraint has been imposed on real spending on goods and services. Federal government purchases of goods and services other than for defence are projected to grow in real terms at an annual rate of 1.5 per cent, a little more than half the growth rate of real GNE, during 1982-87. Provincial government spending on wages and salaries in real terms is projected to grow at 2 per cent, while other provincial spending increases at an annual rate of 1.5 per cent during this period. Apart from the changes introduced in the November 1981 and June 1982 budgets associated with taxation and expenditure levels, we

Table 2-5

Domestic Policy Assumptions in the Base Case

Energy pricing	— Crude petroleum and natural gas pricing schedules and policies are as per the 1981 energy pricing agreements, with revenues split between producing provinces, the federal government, and producers in accordance with the most recent policies.
Tax policy	— All post-budget (November 1981 and June 1982) tax schedules (personal, corporate, and indirect) are in place, including schedules incorporating the 1981 energy pricing agreements, the National Energy Program, and the NEP *Update* where applicable. This includes the Petroleum Compensation Charge, the Canadian Ownership Charge, the Incremental Oil Revenue Tax, the Natural Gas and Gas Liquids Tax on domestic production, the Petroleum and Gas Revenue Tax, and the limitation on the indexation of personal taxes in 1983 and 1984. Quebec personal income tax remains a constant portion of total provincial taxes. All provincial budgets, as of July 1982, are also incorporated.
Expenditure policy	— Government spending on goods and services is restrained, with annual increases in real expenditures averaging as follows: federal government - nondefence, 1.5 per cent, and total defence, 1.7 per cent; provincial governments - wages and salaries, 2.0 per cent, and other spending, 1.5 per cent; municipal governments - wages and salaries, 0.3 per cent in 1982-84 and 0.8 per cent thereafter, and other spending, 1.5 per cent. Government wages are indexed to increase according to the CPI, except for federal wages, which follow the 6 and 5 per cent rule for 1983 and 1984. Transfer payments are indexed as legislated. Established program financing and fiscal arrangements reflect budget changes and the five-province standard for equalization payments. Federal spending associated with capital assistance and subsidies reflects existing government policy. Among other things, allocation to the economic development and energy envelopes is as outlined in the recent budget papers.
Monetary policy	— Canadian interest rates are in line with U.S. rates. The money supply is targeted at 6 per cent.

SOURCE Economic Council of Canada, CANDIDE 2.0 model, July 1982.

have assumed that all other federal programs remain as currently legislated. This includes the limitation on the indexation of federal personal taxes and transfers, and increases in unemployment insurance contributions by employers and employees sufficient to balance the account.

The growth of money supply in the base case projection is constrained to the midpoint of the Bank of Canada's target band (4 to 8 per cent growth). At the same time we permit Canadian interest rates to follow those in the United States so as to relieve some of the downward pressure on the Canadian dollar anticipated during the projection period. In making these assumptions it is implicit that any inconsistency between growth in money supply and nominal income will be resolved. We defer discussion of this until Chapter 5.

The Impact of the U.S. Recovery on the Canadian Medium-Run Outlook

Canadian medium-run prospects depend, among other things, on the strength of export markets in North America and in other OECD and non-OECD countries. The U.S. recovery in the base case projection is characterized by real growth in 1983 and 1984 averaging 3.8 per cent, with the period subsequent to 1984 closer to 3 per cent. The recovery in 1983-84 is not as strong as the recovery periods following previous U.S. recessions. Furthermore, the medium-run growth trend for OECD countries other than the United States in the base case projection is considerably lower than that which characterized the late 1960s and early 1970s.

This pattern of recovery in the United States can be attributed to a continuation of high real rates of interest and their impact on North American credit markets in 1983. In spite of the recent tax increases implemented in the United States and the apparently more accommodative posture assumed by the Federal Reserve Board, there is still the risk that higher short-term interest rates could be caused by the large U.S. deficit during the recovery period and by a continuation of low money growth targets. Given the behaviour of financial markets over the past three years and the efforts to reduce the budget deficit of the federal government during 1983-84, it would be useful to examine the impact on Canada of some alternative projections of the U.S. economy.

For example, suppose financial markets deal efficiently with the needs of the U.S. government to finance large deficits during the period 1983-84. Such an outcome would be aided by some reduction in the deficit resulting from a tax increase such as has been passed recently and by a relaxation of monetary policy allowing some increase in the growth rate of money supply in the United States above the rate assumed in the base case projection. These events could result in a path for U.S. short-term interest rates lower than those in our base case projections. To be specific, in 1983 the U.S. short rate could average 100 basis points less than the base case projection for 1983 and in subsequent years remain below the short-term interest rates of the base case projection. As a result, some of the pressure on the Canadian short rate in 1983 could be eliminated. Furthermore, Canadian export markets in the United States would expand in response to increased U.S. activity associated with housing starts, investment in machinery and equipment, and consumer purchases of automobiles.

For example, by 1985 real growth of GNE cumulatively could be 1.2 percentage points higher (Table 2-6 – higher U.S. growth). This could have a favourable effect (cyclical) on Canadian productivity performance and would also mean some reduction in the unemployment rate from the base case. By 1985 a stronger cyclical recovery in the United States would suggest, as a result of the increased tax base and reduced expenditures associated with stabilization programs, a fall in the ratio of the federal deficit to GNE.

Table 2-6

Selected Economic Indicators, Based on Seven Alternate Nonpolicy Cases, Canada, 1983-87

	1983	1984	1985	1986	1987
			(Percentage change)		
Real gross national expenditure					
Base case projection	1.6	4.1	3.4	2.2	3.0
Higher U.S. growth	1.9	4.8	3.6	2.5	3.1
Lower U.S. growth	1.6	4.0	3.2	1.9	2.7
Higher international oil prices	1.6	4.0	3.3	2.1	2.9
Lower international oil prices	1.7	4.2	3.4	2.3	3.0
Lower personal savings rate	2.9	4.2	3.3	2.8	2.8
Reduced wage expectations	1.4	3.9	3.1	2.0	2.9
Reduced megaproject activity	1.6	4.1	2.9	1.8	3.2
			(Per cent)		
Unemployment rate					
Base case projection	10.4	10.3	10.2	10.2	10.1
Higher U.S. growth	10.4	10.0	9.9	9.9	9.7
Lower U.S. growth	10.4	10.3	10.2	10.3	10.3
Higher international oil prices	10.3	10.2	10.1	10.2	10.1
Lower international oil prices	10.4	10.3	10.2	10.3	10.2
Lower personal savings rate	9.9	9.6	9.4	9.3	9.2
Reduced wage expectations	10.2	10.0	9.8	9.8	9.7
Reduced megaproject activity	10.4	10.3	10.5	10.7	10.6
			(Percentage change)		
Consumer price index					
Base case projection	8.8	7.8	7.2	7.0	7.3
Higher U.S. growth	8.5	7.5	6.8	6.8	7.1
Lower U.S. growth	8.9	7.9	7.5	7.4	7.7
Higher international oil prices	9.3	8.2	7.6	7.4	7.6
Lower international oil prices	8.6	7.5	6.9	6.8	7.0
Lower personal savings rate	8.8	7.8	7.4	7.1	7.2
Reduced wage expectations	8.4	6.9	6.4	6.4	6.8
Reduced megaproject activity	8.6	7.5	6.9	6.7	7.0
Productivity					
Base case projection	-0.9	1.7	1.3	0.6	1.1
Higher U.S. growth	-0.6	2.1	1.4	0.7	1.2
Lower U.S. growth	-0.9	1.6	1.1	0.4	1.0
Higher international oil prices	-1.0	1.6	1.2	0.5	1.1
Lower international oil prices	-0.8	1.8	1.3	0.6	1.2
Lower personal savings rate	-0.3	1.6	1.1	0.9	1.0
Reduced wage expectations	-1.3	1.4	1.1	0.5	1.1
Reduced megaproject activity	-0.8	1.7	1.1	0.5	1.3

(cont.)

Table 2-6 (concl'd.)

	1983	1984	1985	1986	1987
			(Percentage of GNE)		
Federal surplus or deficit(-)					
Base case projection	-5.0	-5.2	-5.1	-5.1	-5.0
Higher U.S. growth	-4.8	-4.8	-4.5	-4.4	-4.2
Lower U.S. growth	-5.1	-5.4	-5.4	-5.6	-5.6
Higher international oil prices	-4.9	-4.9	-4.8	-4.8	-4.6
Lower international oil prices	-5.2	-5.4	-5.3	-5.3	-5.1
Lower personal savings rate	-4.7	-4.8	-4.5	-4.4	-4.2
Reduced wage expectations	-5.1	-5.3	-5.2	-5.2	-5.1
Reduced megaproject activity	-5.2	-5.4	-5.5	-5.6	-5.5
			(Per cent)		
Personal savings rate					
Base case projection	12.9	11.6	11.1	11.4	11.3
Higher U.S. growth	12.8	11.5	11.1	11.3	11.3
Lower U.S. growth	13.0	11.6	11.1	11.4	11.3
Higher international oil prices	12.9	11.5	11.1	11.3	11.2
Lower international oil prices	13.0	11.6	11.1	11.4	11.3
Lower personal savings rate	11.4	10.0	9.4	8.9	9.0
Reduced wage expectations	12.7	11.2	10.8	11.3	11.3
Reduced megaproject activity	13.0	11.6	11.2	11.4	11.3
			(Percentage of GNE)		
Investment					
Base case projection	15.3	15.7	16.6	17.5	17.9
Higher U.S. growth	15.3	16.0	17.1	18.1	18.6
Lower U.S. growth	15.3	15.6	16.5	17.2	17.5
Higher international oil prices	15.3	15.7	16.6	17.4	17.9
Lower international oil prices	15.3	15.7	16.6	17.5	17.9
Lower personal savings rate	15.3	15.9	16.8	17.6	18.0
Reduced wage expectations	15.3	15.7	16.6	17.4	17.9
Reduced megaproject activity	15.2	15.6	16.1	16.6	17.2
Current account of the balance of international payments					
Base case projection	-1.0	-1.8	-2.0	-1.8	-1.7
Higher U.S. growth	-0.8	-1.6	-1.7	-1.6	-1.4
Lower U.S. growth	-1.1	-1.9	-2.1	-2.0	-1.9
Higher international oil prices	-1.0	-1.7	-1.8	-1.6	-1.4
Lower international oil prices	-1.0	-1.9	-2.1	-1.9	-1.8
Lower personal savings rate	-1.6	-2.4	-2.5	-2.5	-2.2
Reduced wage expectations	-0.9	-1.5	-1.5	-1.2	-0.9
Reduced megaproject activity	-1.0	-1.8	-1.8	-1.6	-1.7

SOURCE Economic Council of Canada, CANDIDE 2.0 model, July 1982.

Low growth could result from an upward drift in nominal rates of interest during the decade as the Federal Reserve Board exerts continued downward pressure on money supply growth (Table 2-6 – lower U.S. growth). This would lead to a less favourable U.S. outlook during the medium run, with similar consequences for Canada as export markets in the United States soften and Canadian interest rates move upward in response to movements in the U.S. short rate. In this case, growth could be reduced cumulatively during 1985-87 by nearly 1 percentage point.

Because lower levels of activity in Canada imply a reduced tax base and higher unemployment rates suggest more costly stabilization programs, in the low-growth case the federal deficit as a percentage of GNE could increase above the base case. In the low-growth case it averages 5.5 per cent of GNE during 1985-87.

These two alternate cases suggest that a stronger U.S. recovery than that of the base case might add as much as half a percentage point per year to Canadian real growth during 1983-85. A more buoyant U.S. recovery would also carry with it a cyclical improvement in productivity, leading to some moderate downward pressure on the rate of inflation. However, an extended period of higher real rates of interest in the United States could reduce Canadian real growth by half a percentage point per year at mid-decade. Under the most optimistic of circumstances, Canada cannot count on a strong U.S. recovery to raise activity to levels that will provide substantial reductions in the unemployment rate and substantial improvements in the tax base, leading to large reductions in the federal deficit through increased revenues and reduced spending associated with automatic stabilization programs. Furthermore, there is the medium-run risk of low U.S. growth caused by higher real interest rates.

International Oil Prices and Their Impact on Canada

In the Eighteenth Annual Review we examined the implications for Canada of an international oil price shock in 1985-87 similar in magnitude to the one in 1979-80. The analysis indicated that the blended pricing and taxation measures associated with the National Energy Program and the subsequent 1981 Ottawa/Alberta agreement would transmit the impact of such a shock directly to the consumer price index. This analysis also indicated that higher international oil prices would increase revenues to the federal government from the Incremental Oil Revenue Tax, the Petroleum and Gas Revenue Tax and the Natural Gas and Gas Liquids Tax. As a result of present soft petroleum prices, the current base case includes a much different set of assumptions associated with the world price of crude petroleum than the assumptions used in developing the base case for the Eighteenth Annual Review.

The increase in the federal deficit during the projection period is partly associated with the weakness in the international price of oil. The NEP tax measures specifically provide for tax levies on the difference between the original wellhead price proposed when it was introduced in the fall of 1980 and the new wellhead price as modified in the agreement between Ottawa and Alberta. The world price projections on which the Ottawa/Alberta agreement were based were substantially higher than what we now anticipate. For this reason federal revenues are also much lower than anticipated.

To put this in perspective we have developed two alternate cases that show the impact of international oil prices on Canadian medium-run prospects (Table 2-6 – higher and lower international oil prices). Each alternative is predicated on a different path for the international price of oil. In the former case (higher oil prices), we assume a firming of the international price in 1983 compared with the base case, where a real price decline occurs. During the period 1984-87, rather than assuming a 2 per cent real oil price increase we put in place a 3.5 per cent real increase. The higher international oil price case should not be compared with the international price shock alternative in the Eighteenth Annual Review; it is a gradual rather than a dramatic increase. But the impact on Canada, with respect to direction and the pressure on key economic aggregates, is the same as that which would result from a dramatic run-up in the international price of oil.

For example, higher international oil prices imply higher rates of inflation for the consumer price index. They also imply lower federal deficits and lower growth in real GNE. The alternate case (lower international oil prices) produces the opposite result.

Given current pricing and taxation measures associated with oil in Canada, these results suggest that variations in the international price of oil can influence, among other things, two important indicators: the consumer price index and the ratio of the federal deficit to GNE. Higher international prices lead to more inflation but smaller federal deficits; lower international prices lead to less inflation and larger federal deficits.

The Influence of the Personal Savings Rate on Medium-Run Prospects for Canada

During the current recession the personal savings rate increased substantially in Canada. In 1982 we expect it to average 13.1 per cent. During the period 1976-80 Canadians saved about 10 per cent of their income. It is not uncommon for the personal savings rate to increase during periods of recession, as consumers put off purchases of cars and household durables. In addition, during the current recession both nominal rates of interest and real rates of interest, as measured by the difference between nominal short-term interest rates and the rate of increase of the CPI, are high compared with previous recessions. The expectation of continued inflation could also keep the savings rate up, as could high real rates as lenders demand an inflation premium and continue to reinvest a substantial portion of earnings to protect their real asset base from eroding.

The base case projection for 1983-85 shows a decline in the personal savings rate from 12.9 per cent to an average of 11.3 per cent, or a 1.6 percentage point decline. The declining savings rate in the base case implies a recovery in the rate of real growth of consumer spending in 1983-84 from the low levels anticipated in 1982. However, the level of the savings rate during 1985-87 does not return to the average level for 1976-80; in fact, it averages about 1 percentage point higher than the average during that period.

The base case is consistent with continued expectations of inflation and high real rates of interest. But what might we expect if, in 1983-87, the personal savings rate were to average about 1 percentage point below the average for 1976-80 rather than 1 percentage point above the average for the last half of the 1970s? Certainly consumer spending would be more buoyant, and this would lead to expanded investment activity and an expanded tax base, given that activity levels would be substantially higher.

To quantify the impact of this alternative, we develop a case where the savings rate averages about 9 per cent during the period 1985-87 (Table 2-6 – lower personal savings rate). In this case we assume that the savings rate returns to a level of 10 per cent in 1984 and then continues to fall to an average of 9.1 per cent during the period 1985-87. If this were to occur, real growth in Canada could reach an annual average of 3.2 per cent during 1983-87, substantially above the 2.8 per cent average of the base case projection. Unemployment rates would be reduced during the period by approximately 1 percentage point. There would be some cyclical gains in productivity and some marginal gains in the ratio of investment to GNE. However, because higher levels of personal consumption would imply more imports, there would be some deterioration in the trade balance. Because of the expanded tax base associated with higher activity levels and reduced expenditures associated with automatic stabilizers, the federal deficit as a percentage of GNE would decline. By the end of the period it could be close to 4 per cent of GNE.

This case (Table 2-6) demonstrates that a reduction in the personal savings rate to 1 percentage point below that recorded for the last half of the 1970s could strengthen the Canadian recovery. Consumer attitudes during this recovery period will depend partly on expectations about inflation and real rates of return. If real rates remain high and expectations of inflation remain firm, the personal savings rate is less likely to decline below the average recorded during the last half of the 1970s.

The Impact of Reduced Wage Expectations

In the base case projection, we have introduced wage restraint at the federal level by setting the rate of growth of nominal wage rates at 6 per cent in 1983 and 5 per cent in 1984 as provided for in the June 1982 federal budget. However, for sectors other than the federal government, we have not imposed such a wage restraint program. The reduction in inflation rates in the base case is associated with the impact of the federal wage restraint program, slack labour markets, the working assumptions about inflation rates in the United States, the international oil pricing assumptions and the general path assumed for Canadian export and import prices. In the base case, the inflation rate falls to 8.8 per cent in 1983, a reduction of 2.6 percentage points from 1982. In subsequent years the inflation rate averages 7.3 per cent. However, the base case does not represent the most optimistic outcome associated with the federal wage restraint program.

What would be the impact if wage expectations at other levels of government and in the private sector were reduced to 6 per cent in 1983 and 5 per cent in the years subsequent to 1983 (Table 2-6 – reduced wage expectations)? During the period 1984 through 1986 inflation would average close to 6.5 per cent. In the base case the CPI grows at approximately 7.3 per cent. As a result of provincial governments, local governments and the private sector embracing the wage restraint program, the rate of inflation in the base case is reduced each year during the period 1984 through 1986 by a little less than 1 percentage point.

There are some costs associated with this, however. For example, the wage restraint program implies a falling real wage in both 1983 and 1984, with only a modest recovery thereafter. This fall in the real wage is accompanied by a decline in the wage share and a similar increase in the profit share. Also, the real wage losses lead to slightly lower growth rates during the period of adjustment, a reduced rate of labour force growth and slightly lower rates of unemployment.

These results suggest that a wage restraint program, if pursued by all levels of government and the private sector and not accompanied by a similar program on the price side, could lead to real wage losses and a shift in the functional distribution of income. Although inflation rates might be lowered and unemployment rates reduced, the initial losses in real wages might never be recouped. Of course, other factors might intervene in such a situation. For example, declining rates of inflation as characterized in this alternative, which do approach in the medium run the 6 per cent target set by the government, might be accompanied by personal savings rates that fall faster than those in the base case. In the last section we will examine the impact of such a combination of events on the path of the base case.

Risks and Uncertainty in Energy Supply

The energy supply picture in the base case is predicated on a set of working assumptions, variations of which could have an important impact on aggregates like the growth in real GNE, the inflation rate, the federal government deficit and the trade balance. We have already examined the impact that variations in the international price of oil could have on the rate of inflation and on the federal government deficit in the medium run. There are variations in domestic energy supply that could also have major impacts in the medium term.

During the past year both Alsands and Cold Lake have been dropped from the list of megaprojects planned during the time horizon of our projections. There are other projects where the risk of deferral or cancellation is still present. What would be the impact

Table 2-7

Selected Economic Indicators, Based on Two Alternative Environments,[1] Canada, 1983-87

	1983	1984	1985	1986	1987
			(Percentage change)		
Real gross national expenditure					
Alternative 1	2.9	4.4	3.0	2.7	2.8
Base case projection	1.6	4.1	3.4	2.2	3.0
Alternative 2	1.5	4.0	2.7	1.6	3.0
			(Per cent)		
Unemployment rate					
Alternative 1	9.7	9.1	8.8	8.6	8.5
Base case projection	10.4	10.3	10.2	10.2	10.1
Alternative 2	10.4	10.3	10.5	10.8	10.7
			(Percentage change)		
Consumer price index					
Alternative 1	8.6	7.3	6.7	6.7	7.0
Base case projection	8.8	7.8	7.2	7.0	7.3
Alternative 2	8.7	7.7	7.1	7.0	7.4
Productivity					
Alternative 1	-0.6	1.4	0.9	0.8	1.0
Base case projection	-0.9	1.7	1.3	0.6	1.1
Alternative 2	-0.9	1.7	0.9	0.3	1.2
			(Percentage of GNE)		
Federal surplus or deficit(-)					
Alternative 1	-4.3	-4.2	-3.9	-3.6	-3.4
Base case projection	-5.0	-5.2	-5.1	-5.1	-5.0
Alternative 2	-5.2	-5.5	-5.8	-6.1	-6.1
			(Per cent)		
Personal savings rate					
Alternative 1	11.0	9.5	9.1	8.6	9.0
Base case projection	12.9	11.6	11.1	11.4	11.3
Alternative 2	13.0	11.6	11.2	11.4	11.3
			(Percentage of GNE)		
Investment					
Alternative 1	15.3	16.0	17.0	17.9	18.4
Base case projection	15.3	15.7	16.6	17.5	17.9
Alternative 2	15.2	15.6	16.0	16.4	16.9
Current account of the balance of international payments					
Alternative 1	-1.2	-1.7	-1.5	-1.4	-0.9
Base case projection	-1.0	-1.8	-2.0	-1.8	-1.7
Alternative 2	-1.1	-1.9	-2.0	-1.8	-2.0

[1] Alternative 1 – the combination of higher U.S. growth, higher international oil prices, a lower personal saving rate, and reduced wage expectations. Alternative 2 – the combination of lower U.S. growth, lower international oil prices, and reduced megaproject activity. See Table 2-6 for the outcome, using individual alternatives.

SOURCE Economic Council of Canada, CANDIDE 2.0 model, July 1982.

on Canadian medium-run prospects of the cancellation of the Alaska Highway Gas Pipeline and deferral of Hibernia and the Canstar oil sands mining project? The impact would be a reduced growth rate in 1985-86, accompanied by a reduced ratio of investment to GNE and higher unemployment rates (Table 2-6 – reduced megaproject activity). Because of reduced investment activity we would see an improvement in the current account balance, as the direct and indirect effects of the cancellation of these large projects reduced imports. Beyond the projection period, however, the Canadian trade balance would deteriorate, as lost production from these projects was temporarily made up by increased imports.

Alternatives to the Base Case Projection

We have examined a number of areas of risk and uncertainty. These include the strength of the U.S. recovery, the international oil pricing environment, the behaviour of consumers during the recovery, the impact of reduced wage expectations, and megaproject impacts. Medium-run planning is a strategic exercise. The base case projection is predicated on a specific set of working assumptions. However, as indicated above, there are other working assumptions upon which a base case projection can be built. To illustrate this point, let us consider combinations of the events discussed earlier which, if incorporated in the base case, could have a significant impact on the base case projection (Table 2-7).

For example, we could combine the cases in the previous section, which include a more rapid U.S. recovery, a higher real increase in international oil prices, a more rapid fall in the personal savings rate and reduced wage expectations, to yield alternative 1. Alternative 1 provides some interesting results. During the period 1983-85 Canadian growth averages a little less than 3.5 per cent, and the unemployment rate falls more than 1.5 percentage points below the base case projection by the end of the period. The federal deficit declines below 5 per cent of GNE initially and averages 3.5 per cent of GNE after mid-decade. The ratio of investment to GNE trends upward and eventually is half a percentage point above the base case level; the current account balance shows some improvement from the base case in the medium run.

The most significant aspect of alternative 1 is the relationship between real growth and the federal deficit when compared with the base case projection. The combination of a stronger U.S. recovery, higher world oil prices, more buoyant consumer spending and economywide wage restraint improves real growth and reduces the deficit. However, this combination is not enough to bring balance to the federal budget or to return unemployment rates to the level of 6 per cent.

There are other alternatives that could be developed. Consider alternative 2, characterized by lower U.S. growth, lower international oil prices and a mid-decade reduction in megaproject activity. Here we would see little improvement in Canadian short-term prospects, with a mid-decade reduction in real growth, an unemployment rate that remains near 11 per cent, and government deficits as a ratio to GNE of over 6 per cent in 1986-87.

These cases illustrate the impact that alternative events could have on Canadian prospects. Our method of analysis ignores some of the indirect effects that might occur. However, the biases associated with the analysis are not great. What is significant is that events (exclusive of monetary and fiscal policy) as they unfold could indicate potentially substantial variations around the base case real growth rate. The variations in the unemployment rate and the government deficit as a ratio to GNE could also be substantial. But even in the most optimistic of circumstances, Canadians are unlikely to experience a high level of output and employment in the medium run.

3 Some Medium-Term Economic Issues

In this chapter we address four important medium-term issues – inflation, investment, housing, and the current account of the balance of payments. The issues are all related to current economic difficulties, but in each case some more fundamental problems arise, or are seen to arise – problems with potentially important implications for the economy's performance in coming years. The problems and challenges posed by inflation constitute a recurrent theme. Inflation has, of course, been a major preoccupation of policy makers involved in macroeconomic stabilization. However, decision makers in individual markets have also had to contend with the effects of continuing and uncertain price rises, and of policies designed to address this problem. This applies with respect to investment, housing, and the current account of the balance of payments. Markets in each of these areas have undergone important changes in recent years as a consequence of policies aimed at reducing inflation. At the same time, through its impact on asset values, on the cost of borrowed funds and on the level of taxation, inflation has had an important influence on general conditions for borrowing and lending. It has thereby affected the climate for investment, the market for new housing, and the relationship between Canadian firms and governments and their foreign creditors.

We start by examining some general concerns and conundrums related to inflation. Our recent experience with inflation is summarized. The costs both of reducing inflation and of inflation itself are examined, and the question of how best to balance the costs and benefits of anti-inflationary policies is addressed.

The second issue is investment. As indicated in Chapter 2, the outlook for business investment is not strong. Until recently much of the growth in investment was expected to stem from megaprojects, particularly in the energy area. Some of the risks and uncertainties surrounding megaprojects are discussed. This serves as background to our discussion in Chapter 4 of the key role that megaprojects are expected to play in the government's economic development policy.

The third issue is housing. The outlook for housing is clouded by high real interest rates. By 1987, actual housing starts are expected to fall almost 215,000 units short of requirements based on demographic demand. The shortfall is projected to arise in both multiple and single units. The situation and prospects of both homeowners and renters are reviewed. Government housing policies are considered, and some possible policy approaches to the housing problem are advanced.

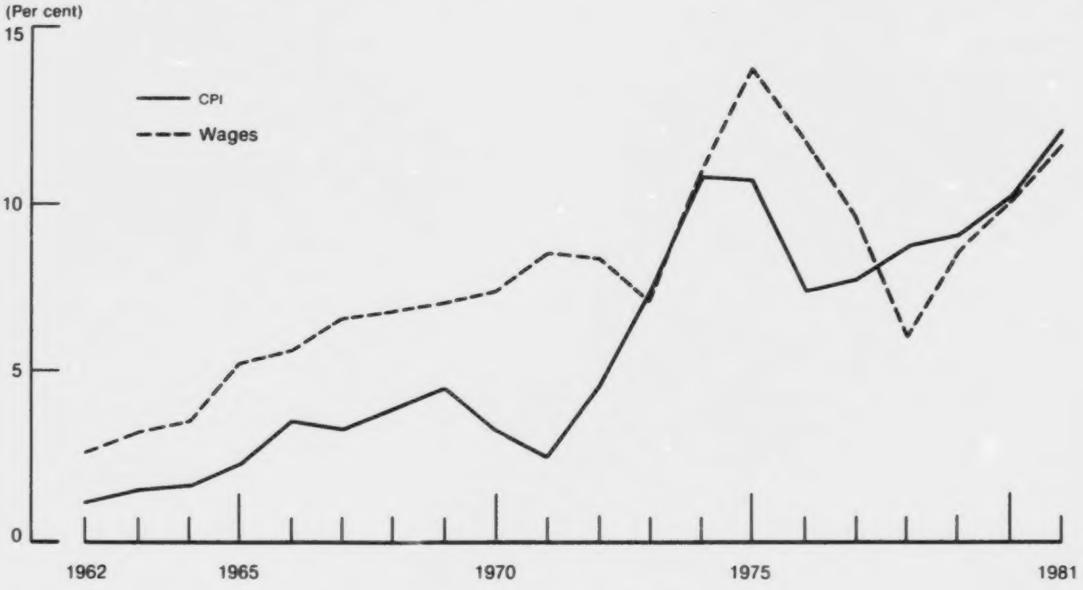
The fourth issue is the current account of the balance of payments. The servicing cost of Canada's large foreign debt, which is expected to continue to increase over the medium term, has become an issue of some concern. This section looks at the factors influencing Canada's trade balance in both goods and services. The outlook for the current account is examined and the deficits (existing and projected) are put into perspective. There is particular emphasis on the prospects for our terms of trade, because an assumed improvement is a critical postulate underlying the government's economic development strategy.

Inflation

The Council has addressed the problem of inflation in several Annual Reviews.[1] Concern over inflation is not new, but it has become more pressing in recent years with the escalation in prices and the evidence that high rates of price increase are becoming deeply entrenched in the Canadian economic system. Looking back over the past two decades, one can pinpoint some periods of success in reducing the rate of price increase. Over the longer term, however, the unmistakable pattern has been toward a steady upward ratcheting of the rate of increase in both wages and prices (Chart 3-1). With inflation becoming more deeply embedded in the economic process, there has been a sharpening of the conflict between those who are concerned about the failure of government policy to reduce significantly the inflationary pressures and those who are concerned about the costs such policy measures would entail.

Chart 3-1

Annual Change in Prices and Labour Costs, Canada, 1962-81



SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada.

Recent Experience

The origins of the recent inflationary era can be traced back to the early 1960s, when the Canadian economy underwent a strong expansion. The decline in unemployment over the first half of the decade was accompanied by significant upward pressure on wages and prices. In the mid-1960s, the requirements of the Vietnam War, superimposed on other domestic and external demands, led to a marked overheating of the U.S. economy. Under the fixed exchange rate system of the period, these inflationary pressures were readily transmitted to the Canadian economy. Concern over inflation led to the establishment in 1969 of a Prices and Incomes Commission (PIC) and to the implementation of an accompanying policy of monetary restraint. While the PIC was unsuccessful in gaining voluntary agreement to restrain wage and price increases, the restrictive policies, coupled with an appreciation of the dollar and a fortuitous easing in food prices, contributed to a marked reduction in inflation by late 1970.

By 1971 the focus of government policy had shifted from inflation to unemployment. A highly expansionary monetary policy was introduced in 1971 and maintained for some years thereafter. The resulting expansion in Canada was reinforced by the coincident upturn among other OECD countries, including the United States – which had adopted expansionary policy along with wage and price controls from 1971 to 1973-74. To these demand pressures were added a number of supply shocks, beginning in 1972 with some major disruptions in world production of grains and other agricultural products. Between 1971 and 1973 food, metals and other world commodity prices skyrocketed, and in response to the combination of demand and cost pressures, the rate of increase in the Canadian CPI accelerated from below 3 per cent to over 7.5 per cent.

World food prices were still rising at a rapid pace in 1974 when the cutback in OPEC oil production led to more than a fourfold increase in world oil prices. In the United States, the lifting of controls gave rise to a further inflationary "bubble." The inflationary process had gained considerable momentum by this time, and most countries experienced only a moderate easing of inflation in the world recession of 1974-75. In Canada, however, where the recession was milder than in the United States and other OECD countries, inflationary pressures did not abate. Indeed, there was a sharp escalation in wages, with a number of the pace-setting agreements concluded in the public sector. Expansionary policies, and especially the very rapid growth maintained in the money supply until the last quarter of 1975, helped to sustain economic activity as well as inflationary momentum. Cost pressures pushed the annual rate of increase in Canada's CPI to just under 11 per cent in 1974 and 1975.

This country's subsequent experience with wage and price controls, coupled with a much more restrictive stance for monetary and fiscal policy, was moderately successful in reducing the rate of inflation. A number of studies suggest that the wage controls which were in place from late 1975 to 1978 did contribute to a significant drop in wage settlements.[2] While the profit controls appear to have been less restraining – and although the control program imposed various types of economic and noneconomic costs that must be taken into account in formulating an overall assessment – the restraint on wages did contribute to a significant reduction in the rate of price change over the control period.

As already mentioned, considerable ground has been lost in the period since controls. Among the more important factors underlying the recent escalation of prices have been: higher import costs – associated in part with the second big surge in world oil prices in 1978 and 1979; a sharp increase in food prices in 1978 and 1979; and the adjustment in Canada to higher energy costs beginning in 1980. The steady increase in wage settlements has contributed to the deterioration in price performance, and is a particularly worrisome aspect of recent experience.

The Costs of Reducing Inflation

Economists have taken differing positions on the costs of reducing inflation, depending on the broader conceptual framework from which they view economic relationships and the dynamics of the market system. The most optimistic view is put forward by those economists who believe that prices are highly flexible and that individuals are "rational" in their expectations – that is, that they take account of all information and do not make systematic errors in judgment. Price flexibility ensures that markets clear in the short run and are basically in equilibrium. Because individuals are rational they will make informed predictions about policy moves and their effects, based on past observation, and they will adjust their behaviour accordingly. Thus unless the government does the unexpected, its policies will affect prices but not real output. The "rational expectations" model finds particular favour among those economists who believe that the onus for reducing inflation rests entirely with monetary policy. Declines in the rate of money supply growth are seen to have a strong and relatively rapid influence on the rate of inflation. This is achieved at very little cost in terms of lost output and employment because the firm stance of the monetary authorities exerts an immediate and powerful impact on inflationary expectations.[3]

While these formulations have some appealing features, we believe that a different and much more pessimistic view is more consistent with Canada's recent inflation experience. The available evidence certainly does not support the idea of price and wage flexibility. Indeed, it suggests quite the opposite. Prices and wages have a large inertial element and tend to adjust very slowly to new information. While it is true that monetary policy can have a major impact on aggregate demand, the size of the multiplier, the extent of the lag, and its split between price and output are all difficult to predict. Moreover, price shocks (as have occurred recently with respect to food and energy) and increases in import prices – which are especially important in the open Canadian economy – may seriously erode efforts to restrain wage and price increases.

Canada's recent experience highlights the extent to which inflation has become entrenched within the economy. The acceleration in prices in the mid-1960s and over 1971-73 can be linked in considerable part to expansionary policies and strong growth in aggregate demand.[4] But while prices accelerated under strong demand pressures in these two periods, there was no corresponding deceleration during the recessions of 1974-75 and of 1980 and 1981. Indeed, in both periods there was continued acceleration in both wages and prices despite the weakness in aggregate demand.

The course of inflation in these recessionary periods clearly indicates the considerable downward inflexibility in both wages and prices. Because prices and wages decline very little in the short run, markets do not adjust readily to problems of excess supply. This means that much of the short-term impact of a shortfall in demand is on output and employment – quite contrary to what is suggested by the "rational expectations" model.

To appreciate why prices are relatively rigid, it is necessary to move from the concept of a market that has homogeneous goods traded in an auction-like setting to a more realistic view that takes into account heterogeneous goods and labour services, contracts, periodic negotiations, and the fact that the relationship between buyers and sellers frequently involves various investments and longer-term commitments.[5] In this more complex setting there is likely to be greater emphasis on stability in order to create conditions conducive to the investments and commitments required by both buyers and sellers. Prices frequently will not adjust to a temporary movement in demand because such a change would involve a violation of the contract – whether implicit or explicit – between buyers and sellers.

The downward stickiness of wages can be similarly understood in the context of the general incentive of employers and workers to establish a stable long-term relationship in which common ideas of equity are respected. A stable relationship reduces the costs of hiring and training for employers and the costs of job search and temporary unemployment for workers. While a number of models of wage behaviour have been proposed, one of the most appealing is based on the importance of relative wages in the worker's concept of equity.[6] It is evident that workers will strongly resist a wage settlement that reduces the group's relative position on the wage scale. An offer that may appear attractive on the basis of price expectations may be unattractive on the basis of the wages already negotiated by other groups. Some recent studies provide empirical evidence of the importance of wage spillovers in Canada.[7] It was found that the wage gains negotiated by some bargaining units had a significant influence on the increases obtained by other units within the same broad regional and industrial classification. The studies indicate that the concept of wage spillover cannot in itself fully explain wage developments; other determinants, such as the degree of labour market slack, price expectations, and perhaps the need for price catch-up, must also be taken into account. Empirical studies incorporating spillover effects, however, do shed some light on the pattern of wage change in Canada.

Workers' concern over relative wages creates a transmission mechanism whereby the wage increases recorded in one period become an important factor in determining the wage and price increases in subsequent periods. Wage behaviour thus contributes to the existence of an underlying rate of inflation, which is passed on from period to period and which changes very slowly in response to a change in economic conditions. This "inertial inflation" is generally viewed as being an important element of Canada's recent inflationary experience.

With inflation so firmly embedded in formal and informal contracts, it is very difficult to reduce rates of price and wage increases through demand management policies. No group wants to take the initiative in moderating its demands and to accept the attendant risk that it will lose its position on the wage scale. A number of studies have illustrated the minimal reductions in wage and price inflation that occur in the short run with increases in the degree of labour market slack and unemployment. In the short term, all variables except that of labour market tightness are assumed to remain unchanged. The evidence suggests that the moderating effect of increases in unemployment is slight, particularly so at high rates of unemployment; for example, the average estimate of one group of studies is that an increase in the unemployment rate from 8.5 per cent to 9.5 per cent would buy only a short-run reduction in wage inflation of about one fifth of 1 percentage point. The largest reduction estimated in any of the studies was only about two fifths of a percentage point. This suggests that the short-term prospects for reducing inflation through demand management are fairly limited.[8]

Certainly a sustained weakness in demand will eventually have the desired effect of significantly reducing inflation. Price expectations will be revised and wage behaviour will be altered over time in response to vigorous anti-inflationary policies. And as this occurs, the nominal demand shock imposed by the government is likely to have more of an effect on prices and show up less in the form of reduced output. Because of the large chronic component of inflation, however, these results will probably materialize slowly and at considerable cost.

A recent study of the historical experience of the United States and eight other countries illustrates the nature of the problem. In only four of the fourteen episodes examined did restrictive demand policies achieve a marked slowdown in inflation with what was considered a "minor" loss in output. The successful episodes, moreover, generally had some unique elements – for example, the favourable collective bargaining structure which enhanced the anti-inflationary offensive in Japan in 1976-80 – making them of limited relevance to the current situation in Canada and the United States. Evidence from the study suggests that in the United States only 10 to 40 per cent of nominal demand changes are absorbed by the inflation rate in the first year.[9]

Simulations run on the Council's CANDIDE model provide a further illustration of the difficulty of reducing inflation through restrictive policies. These simulations take into account the direct impact of labour market conditions on wage negotiations and incorporate the feedback effects of lower rates of wage and price changes on future wage negotiations. They do not allow for any appreciation of the exchange rate that might be expected to result from the decline in wages. Nor do they allow for any decreases in

Table 3-1

Projected Impact of Higher Unemployment on Wages and Prices in the CANDIDE Model,[1] 1983-87

	1983	1984	1985	1986	1987
			(Per cent)		
Change in wage rate[2]					
Case A	-.30	-.20	-.20	-.24	-.23
Case B	-.50	-.40	-.40	-.43	-.43
Change in consumer price index[2]					
Case A	-.10	-.10	-.10	-.12	-.12
Case B	-.20	-.20	-.20	-.20	-.20

[1] Based on a simulation of the wage and price sectors of CANDIDE 2.0, with other sectors left exogenous.

[2] As the result of an unemployment rate increase of 1 per cent in Case A and 2 per cent in Case B.

SOURCE Economic Council of Canada, CANDIDE 2.0 model, July 1982.

nonwage costs that might occur. The results, which are set out in Table 3-1, indicate a relatively modest estimated reduction in inflation associated with higher unemployment. They are at the lower end of the range of available estimates.

The Costs of Inflation

The development of an appropriate policy response requires not only an understanding of the costs of reducing inflation, but also an appreciation of the costs of living with inflation. The latter can be divided into the costs in economic efficiency terms, which arise because the inflationary process leads to some forms of waste and the use of additional resources, and the costs in distributive terms, which result from the fact that inflation produces both winners and losers.

Economic Costs

Our concern in this section is with the effect of inflation on the rate of economic growth. Inflation imposes a cost in this context, both because it leads to the use of additional economic resources, and because it gives rise to various distortions and other inefficiencies. When the alternative of living with inflation is discussed, consideration is often given to an anticipated inflation in which wages, interest rates and other money payments adjust promptly to the expected rate of price increase. This need not, of course, be the case. Prices may be highly volatile, and variations in the rate of inflation may add enormously to the uncertainty and risk of market transactions. Even when the rate of inflation is relatively stable, however, there is bound to be considerable uncertainty about price performance over the medium and longer term. This increases the difficulty of long-term planning and adds particularly to the riskiness of large-scale capital projects. One of the important costs of inflation arises from the resources drawn into predicting and coping with price changes. These costs are borne both by firms planning major investments and by individuals who must consider whether they would be better off to place their savings with a financial intermediary or in such supposed inflationary hedges as real estate, gold or collectibles.

When inflation is steady and predictable, economic costs are lower but still not negligible. Although inflation is anticipated, the resulting premium may not be incorporated in the terms of the transaction since many institutional and contractual arrangements cannot be changed fully and immediately. Thus even fully anticipated inflation will affect relative prices and thereby cause some distortions in the allocative process. Allocative problems become more serious when we consider the influence of inflation on after-tax relative prices. The failure to fully adjust the tax system to inflation leads to significant distortions in a number of areas. To the extent that the marginal tax rates paid by borrowers and lenders differ, the tax system influences the quantity of lending and borrowing. By increasing nominal interest rates, inflation accentuates whatever distortions are introduced by the tax system in the economy's real and financial savings flows. Because capital cost allowances are not indexed for tax purposes, inflation reduces the real value of the tax saving they provide to firms (although this is partly offset by provisions allowing for the accelerated write-off of capital investment – such as manufacturing machinery and equipment, which can be written off over three years). Similarly, inflation affects the real cost of holding inventories. Since firms are able to deduct only the book cost of goods sold and not replacement costs, they are taxed on income needed to maintain inventory stocks. Inflation also affects the capital structure of firms: an increase in anticipated inflation reduces the real after-tax cost of debt financing, which is tax deductible, and enhances its attractiveness relative to equity financing, which is not.

A widely cited cost of inflation arises in connection with its effect on nominal interest rates, and the incentive it thereby provides to turn from money to inferior alternatives for transaction purposes. Estimates suggest, however, that the welfare costs of this effect are not large.[10] A more important consequence of inflation is that it increases the frequency of price changes and the amount of resources this activity absorbs. During a period of inflation, information about relative prices can quickly become obsolete. It is then necessary to expend time and resources to keep the information up-to-date. There is also the expense of more frequent contract negotiations in the private sector and, perhaps more important, the administrative and regulatory costs that arise due to the traditional reliance on the government to moderate the impact of inflation. More generally, inflation tends to shorten the time horizons of many other economic decisions, especially those concerning investment. In addition, with high rates of inflation, income distribution questions become a matter of continuing public debate, and considerable resources are spent trying to influence policies affecting them.

Distributive Costs

Inflation is usually not fully anticipated; contracts do not normally adjust promptly and completely to reflect changes in expected inflation; and the tax system is not fully indexed. As a result, inflation does have a significant influence on the distribution of income and wealth. Because of lags and rigidities in the adjustment process, even fully anticipated inflation would have important redistributive effects. In 1976, when the Council looked at this issue in some detail, we identified some important winners and losers from inflation.[11] We found that the federal government was a major beneficiary because of the progressivity of personal income taxes, the lack of inflation adjustment in tax regulations with respect to corporate inventory and capital investment, and the government's position as a net debtor. The effect of inflation on corporate taxes was to reduce substantially the real income of nonfinancial corporations, although firms received some offsetting benefits through the effect of inflation on the real amount of their long-term indebtedness. Workers experienced rising real earnings through the 1960s but found it more difficult to keep pace with accelerating inflation in the early 1970s. In addition, since only a small number of private pension plans were indexed, workers receiving pension benefits experienced a steady erosion in their real income. Among households in general, the major losers from inflation during the first half of the 1970s were those who had large holdings of financial assets; the winners were those who incurred fixed obligations to purchase appreciating assets, especially real estate.

There were important changes in relative prices and in the degree of adaptation to rising prices during the second half of the 1970s, but inflation impacted on government, on corporations and on households in many of the same ways as in the first part of the decade. Through the latter part of the 1970s, the implicit inflation premium on interest rates still did not fully compensate lenders for the inflation-induced reduction in the real value of their capital. This situation has changed to some extent with the dramatic rise in interest rates over the past couple of years. Through the 1970s, however, interest rates did not keep pace with inflation, and during the accelerating inflation of the mid-1970s in particular, a wide gap developed between actual inflation and the inflation apparently expected by lenders. The effect of this lagged interest rate adjustment was to transfer purchasing power from the personal sector, which is a net lender, to the corporate sector and governments, which are net borrowers. Within the personal sector, it is again important to distinguish those who bore the burden of holding financial assets and unindexed pensions from those who were able to benefit from rapidly rising real estate prices.

The government sector gained from inflation not only through its position as a net debtor, but also because of the lack of full indexation in the tax system. The indexing of the main personal exemptions and the tax-bracket limits in 1974 eliminated much of the impact of inflation on personal income taxes. While the tax treatment of investment income does not make appropriate provision for the fact that part of such income is an inflation premium intended merely to maintain the real value of capital, special exemptions on investment income and related provisions (such as apply to Registered Retirement Savings Plans – RRSPs) have reduced the extent of the resulting redistribution. The government sector continued to benefit significantly, however, through the effects of inflation on business tax payments. The insufficient provisions within the tax system for the costs of maintaining capital (both fixed assets and inventories) have resulted in artificially inflated profits and higher corporate taxes than would have been the case in a noninflationary environment. On the other hand, the government has introduced relieving measures designed to compensate at least in part for the increased corporate tax burdens caused by inflation.

The overall effect of inflation in the corporate sector depends on the relative magnitude of the

Table 3-2

Nominal vs. Real Effective Tax Rates, Selected Industries, Canada, 1975-80

	Metal mines		Mineral fuels*		Other mining	
	Nominal	Real	Nominal	Real	Nominal	Real
1975	38.6	45.0	35.4	39.4	53.1	82.9
1976	33.5	43.8	31.9	36.2	49.2	74.9
1977	24.5	36.1	31.8	36.1	38.2	57.9
1978	27.4	44.1	25.2	29.4	41.5	64.8
1979	25.2	32.8	20.7	23.1	32.5	50.7
1980	29.6	35.4	19.5	20.5	51.7	75.6
	Primary metals		Metal fabricating		Nonmetallic mineral products	
	Nominal	Real	Nominal	Real	Nominal	Real
1975	24.6	29.0	32.0	41.7	32.3	41.8
1976	24.9	41.8	36.9	43.2	32.4	42.9
1977	14.1	19.1	29.4	38.7	26.9	35.2
1978	13.7	21.0	33.6	48.9	32.4	44.8
1979	14.1	32.7	34.8	48.8	30.0	42.5
1980	24.7	33.0	34.3	45.0	30.5	38.4
	Petroleum and coal products*		Manufacturing		Energy*	
	Nominal	Real	Nominal	Real	Nominal	Real
1975	35.0	52.2	33.9	39.3	35.2	45.5
1976	26.4	41.1	35.2	41.7	29.9	38.9
1977	23.7	39.3	30.8	41.1	29.0	38.4
1978	21.5	37.3	26.0	37.6	23.8	32.8
1979	27.6	38.0	26.3	38.2	24.3	30.7
1980	30.5	41.8	27.4	37.7	25.7	31.9

*Crown royalties are treated as a cost.

SOURCE Data from Dr. Keith Brewer of Energy, Mines and Resources Canada.

losses incurred through taxation and the gains realized from the unanticipated depreciation in corporate debt. The general dimensions of the former are suggested by Table 3-2, which indicates the size of the gap between nominal and real effective tax rates for various industrial sectors. The data indicate that real tax rates tend to be substantially higher than nominal rates, and that there are very large differences in the real rates applying to different industries as a result of differences in the nature of corporate assets and in the ability of firms to take advantage of various offsets and incentives in the tax system. One study that attempted to weigh these tax-related losses against the gains from the decline in real corporate debt estimated that nonfinancial corporations tended, on balance, to be losers from inflation, though there were significant differences between industries and over time.[12] In 1980, for example, the losses from inflation exceeded the gains in the manufacturing sector, but the two were approximately offsetting in the case of mineral fuels. And in 1973-75, when inflation increased sharply and a large difference emerged between actual inflation and anticipated inflation – on the basis of which corporations compensated their creditors – a number of industrial sectors were net beneficiaries from inflation. These general conclusions were based on a number of judgments and must be interpreted cautiously. It is apparent, however, that over the last few years interest rates have adjusted to take account of higher rates of inflation. (Indeed, the inflation premium in interest rates may now more than compensate for the effects of inflation.) This would suggest that the corporate sector could be more adversely affected by inflation in the early 1980s than during the 1970s.

Balancing the Costs and Benefits of Anti-Inflationary Policies

The basic policy question then, is: Do the longer-term benefits of controlling inflation – improved efficiency and higher real output, in conjunction with a less haphazard and more equitable distribution of income and wealth – outweigh the costs of temporarily forgone output and employment? One could measure the transitional output loss associated with anti-inflationary policies and, conceptually at least, balance that against the discounted stream of benefits associated with price stability. While the latter is extremely difficult to quantify, it is clear that the uncertainty, the distortions, and the arbitrary redistribution that result from volatile price movements are of great public concern. Some economists have suggested that the gains from reducing inflation are not only substantial but may in fact increase over time in pace with the general expansion of the economy. This raises the possibility that anti-inflationary policies may yield a permanent stream of positive benefits, which would be certain to outweigh any once-and-for-all costs that might be incurred.[13]

The case for a firm policy response is strengthened by a realistic consideration of the alternative. A laissez-faire approach to the steady upward ratcheting of costs and prices is bound to lead eventually to the realization that some corrective action is necessary. The alternative to slowing inflation now is to slow it at some future time when inflationary pressures will have become stronger and the consequences of greater concern. With inflationary expectations at a higher level, the adjustment process would be more difficult and the costs of controlling inflation in terms of lost output and increased unemployment would be considerably higher.

While we do not believe policy makers can afford to benignly neglect the problem of inflation, we do see the need for considerable judgment in determining how quickly they should try to achieve price stability. A desirable policy would, in our judgment, balance the need for firmness and resolve with a sensitivity to the extreme hardship that would result from efforts to bring about an overly rapid reduction in inflation. This general consideration is basic to our view on the appropriate stance of policy, as will become evident in our discussion of monetary and fiscal policy in Chapter 5 and in our conclusions and recommendations in Chapter 6.

Investment

Business expenditures on plant and equipment must be made to replace worn-out capital, to make net additions to the existing capital stock and to expand productive capacity. Business investment also serves to improve the efficiency of the production process. More efficient machinery and equipment are developed continuously as technology evolves. Firms wanting to remain competitive must adopt new methods of production by investing in new capital goods. Investment is the dynamic element on the supply side of the economy.

Investment is also important because of its impact on aggregate demand. If conditions are right, it can be a leading sector in generating growth of demand. Typically, however, business investment tends to lag behind the business cycle and does not pick up until recovery is well under way. In present circumstances, interest centres on whether and to what extent investment is likely to be a factor in the Canadian economy's recovery from the current recession.

Considerable attention has focused on investment in large megaprojects. The importance for the economy of these readily identifiable investment projects can be grasped more easily because of their concreteness and specificity. Less easily grasped is the significance of smaller investment projects, which are expected to comprise more than three quarters of investment by the turn of the century. In many ways, these smaller projects are a more vital determinant of the economy's growth prospects and supply potential.

At present, the investment climate is not good. Low operating rates are expected to persist. Relief from high real interest rates is likely to be limited as long as a restrictive monetary policy is maintained. The financial position of the business sector is weak. Profits are down and are not expected to bounce back quickly. Balance sheets are strained and must be restored. Conditions are definitely not right for strong growth of business investment in general.

Two tax changes in the November 1981 budget could have a somewhat further dampening impact on investment. These changes permit only 50 per cent capital consumption allowances in the year assets are acquired, and extend the corporate surtax until the end of 1983 (at 5 per cent in 1982 and 2.5 per cent in 1983). In contrast, in the United States, tax changes have been introduced that lower corporate tax revenue. The most important of these is a liberalization of depreciation allowances, permitting taxpayers to write off autos and trucks over three years, machinery and equipment over five years and buildings over fifteen years. There is also a 25 per cent tax credit for increased spending on research and development, and a cut in the corporate tax rate for smaller corporations.

Following these recent tax changes, comparisons of relative tax burdens on both sides of the border are no longer likely to be clearly in Canada's favour. In a 1978 study the Department of Finance concluded that "effective corporation income tax rates have been consistently lower in Canada than in the U.S. over the 1972-1977 period. In 1977, the overall effective corporation tax rate in Canada was some 6 percentage points lower than in the U.S. This advantage in favour of Canada results from both the more generous depreciation allowances and write-offs, and the lower statutory tax rates." The study also concluded that "most industrial sectors enjoy lower effective corporation income tax rates in Canada than in the U.S.," and that "small business corporations generally face lower effective tax rates in Canada than in the U.S."[14]

While the corporation tax rate is still lower in Canada, in general capital consumption allowances now appear to be more generous in the United States. Taking into account the investment tax credit, the after-tax cost of capital investment is generally probably higher in Canada for investment in automobiles, machinery and equipment, and buildings. A possible exception to this is investment in manufacturing and processing equipment qualifying for the 50 per cent write-off. Small business corporations, however, probably still benefit from lower taxation in Canada, particularly given the increase in the small business deduction in the November 12, 1981 budget, the exemption of small business from the extension of the federal surtax, and the two-year exemption of small business from corporation income tax in Ontario. But any definitive conclusions on the implications of recent tax changes for the relative corporation tax burdens in Canada and the United States would have to be based on more than these casual observations and would require another thorough study along the lines of that done by the Department of Finance in 1978. This will be possible only after tax data incorporating the recent tax changes become available.

Major Investment Projects

Before passing judgment on the likelihood of a strong investment-led recovery, it is necessary to consider the prospects for investment in megaprojects, a type of investment with a momentum of its own, which before the recent disillusionment set in was expected to play a key role in the government's economic development strategy. In its *Report on Major Capital Projects in Canada to the Year 2000*, the Major Projects Task Force defined a major project as "a specific investment which, either through the size of the initial capital investment or through some anticipated major effect, will have a significant impact on the Canadian economy, excluding real estate and property development projects."[15] An inventory of major projects with a capital cost of $100 million or more was compiled. It included projects with a total estimated value of $440 billion by the turn of the century, with much of the proposed spending concentrated in the present decade. The federal government has used this figure to support its case that the medium-term prospects for investment are strong.

Table 3-3 presents an industrial and regional breakdown of major investment projects based on an

Table 3-3

Estimated Expenditures for Major Investment Projects[1] Expected to Start in Canada before 1990, by Industrial Group and Region[2]

	Proportion of total expenditures	Total value	Atlantic provinces	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon and Northwest Territories	Interregional or undefined locations
	(Per cent)					(Millions of 1980 dollars)					
Hydrocarbons and petrochemicals	49.1	121,907	8,065	4,061	1,647	-	2,700	27,420	11,084	66,430	500
Electric generation and distribution	34.4	85,409	8,057	37,988	11,798	2,397	1,086	8,287	15,696	100	-
Metal mining	2.6	6,477	160	-	2,595	-	1,118	-	2,029	575	-
Industrial minerals	3.9	9,608	890	-	-	550	2,700	2,085	3,383	-	-
Forest products	1.1	2,827	158	540	961	-	-	259	909	-	-
Primary metals	1.7	4,176	-	500	1,476	500	-	-	1,700	-	-
Transportation	7.1	17,652	2,162	1,096	3,365	-	-	1,396	3,473	-	6,160
Total	100.0	248,056	19,492	44,185	21,842	3,447	7,604	39,447	38,274	67,105	6,660
							(Per cent)				
Proportion of total expenditures		100.0	7.9	17.8	8.8	1.4	3.1	15.9	15.4	27.1	2.7

[1] Defined as those projects with an investment value of more than $100 million, valued in 1980 dollars.
[2] Excluding the investment expenditures that were originally anticipated for the Alsands project.
SOURCE Based on the Industry, Trade and Commerce *Major Capital Projects Inventory*, October 1981.

updated version of the major capital projects inventory with Alsands deleted.[16] Major investment projects included add up to almost $250 billion (1980$). While this looks like an extremely large sum, it represents less than a fifth of the total investment expected between 1980 and the year 2000. Investment in energy-related industries accounts for 84 per cent of the total major capital projects, with 50 per cent originating in the hydrocarbons and petrochemicals industry and 34 per cent in the electrical generation and distribution industry. The transportation industry follows with 7 per cent of major capital projects. Projects in the other four industries each account for less than 4 per cent of the total.

Despite their concentration in the energy sector and in the western part of the country, major capital projects are expected to generate benefits to other sectors of the economy and to all regions of Canada. Major capital projects are thus expected to contribute more generally to economic growth by creating a relatively broad-based demand for the output of primary industries, construction, manufacturing, utilities, trade, finance and services, with the resulting employment increases spread across the entire country. Some of the major projects are already committed or are under serious consideration; others are still on the drawing board. Some, which were expected to be under way soon, have been delayed or shelved due to changing economic circumstances.

As we discuss more fully in Chapter 4, changes of major significance have occurred in the energy area. With the current world oil glut, prices for imported oil will likely be much lower than expected when the National Energy Program was developed. This will limit the room for scheduled increases in the domestic oil price and it will reduce the incentive provided by the New Oil Reference Price for the development of more expensive sources of energy, involving enhanced oil recovery, synthetic oil from oil sands projects, offshore drilling, and exploration and development in remote areas of the country. Thus the main factor contributing to optimism about large investment projects has reversed and is threatening to undermine the viability of many energy megaprojects.

Major capital projects in both the energy and nonenergy areas are probably more vulnerable than other investment projects to high interest rates and inflation. Given the long lead time between the investment and the start of production, the capital intensity of the projects, and the sheer magnitude of the sums involved, firms participating in major capital projects will have to rely very heavily on external sources of funds to finance their investments. High and rising interest rates could make the external debt very burdensome and could squeeze cash flow to a dangerous extent, again threatening the viability of the projects. Inflation itself poses a threat to many megaprojects. The escalation of costs for large construction projects has been notorious in the past, running well ahead of inflation.

Energy megaprojects also have characteristics that make them inherently riskier than other investments. These may make the terms under which they can be financed less favourable. Many megaprojects embody relatively recent and unproven technology. Accidents and shutdowns could plague the projects. Syncrude is a good case in point. More tragically, the sinking of the Ocean Ranger is a spectre that will long haunt offshore drilling.

The rate of return to investors in energy megaprojects is further influenced by the tax and regulatory regime of the federal and provincial governments. Moreover, federal-provincial disputes over such matters create a climate of uncertainty which can contribute to further delays in project development and significantly higher costs.

Confronted by a world oil price that might not rise as much as expected and by high inflation and high real interest rates, the risks associated with investing in the energy megaprojects are undoubtedly very great. The rejection by the private partners in the Alsands consortium of the Ottawa/Alberta offer to adjust taxes to guarantee a 20 per cent rate of return on investment underlines one particular assessment of the relative risks and returns involved. Given the great riskiness of individual projects and the common sources of risk, it would perhaps be prudent not to count so heavily on energy megaprojects to fuel growth over the decade.

Summary

The overall outlook for investment is presented in Table 3-4. The forecast reflects revisions in the expected nature and timing of megaprojects, and the unfavourable outlook for manufacturing investment as a result of the low rate of capacity utilization and the weak financial position of Canadian corporations. Megaproject investment is concentrated in mining, transportation and utilities. Total business investment is projected to decline in 1983 to 15.3 per cent of GNP from its high of 16.6 per cent in 1981. The weakness in investment is expected to be concentrated in the manufacturing sector – especially hard hit by the recession and high real interest rates. Investment is projected to lag rather than lead the recovery and is not expected to pick up really strongly until 1985. The sources of investment growth

Table 3-4

Investment, by Industry, as a Proportion of Nominal GNE, Canada, 1980-87

	Proportion of GNE							
	1980	1981	1982	1983	1984	1985	1986	1987
	(Per cent)							
Agriculture; fishing and trapping	1.5	1.4	1.0	1.0	1.0	0.9	0.9	0.9
Forestry	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Mining	2.8	2.8	2.9	3.0	3.0	3.2	3.5	3.7
Manufacturing	3.3	3.8	3.4	3.0	3.1	3.5	4.0	4.3
Construction	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4
Transportation	1.2	1.6	1.8	1.7	1.7	2.0	2.2	2.2
Communication	0.9	0.9	0.9	0.8	0.8	0.9	0.9	0.9
Finance, insurance, and real estate	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.3
Utilities	2.6	2.6	2.6	2.5	2.4	2.4	2.3	2.3
Wholesale and retail trade	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.6
Commercial services	1.4	1.3	1.3	1.2	1.5	1.5	1.3	1.3
Other noncommercial services	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
College and university education	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total business (on a National Accounts basis)[1]	16.1	16.6	16.0	15.3	15.7	16.6	17.5	17.9

[1] Figures may not add up because of rounding.

SOURCE Economic Council of Canada, CANDIDE 2.0 model, July 1982.

in that year will be mining, particularly oil and gas wells, transportation, and manufacturing. The improvement in manufacturing investment is the normal cyclical response to an established recovery.

Housing

The outlook for housing in the medium term is clouded by the prospects of high interest rates and slow growth in real personal disposable income. While average mortgage rates are expected to decline in step with inflation toward 15 per cent, real mortgage interest rates (defined as the nominal mortgage rate minus the rate of increase in the consumer price index) are projected to remain up at almost 8 per cent in the medium term. This is significantly higher than the 4.5 per cent average real mortgage rate over the 1957-76 period. With real mortgage rates that high, investment in housing loses much of its appeal as a highly levered hedge against inflation. High mortgage rates have major implications for the key issues of the availability and affordability of housing in the medium term.

Against a backdrop of high interest rates, total housing starts are projected to average 167,000 units per year over the 1982-86 period. This is appreciably less than the housing requirements of 210,000 units per year estimated by the Canada Mortgage and Housing Corporation (CMHC) on the basis of demographic demand. This gap of 43,000 units per year between starts and requirements would add up to a cumulative shortfall of almost 215,000 units by 1987. Single-unit housing starts are forecast to average 85,000 units from 1982 to 1986, compared with requirements of 113,000. Multiple-unit starts are projected to average 82,000 per year compared with the 97,000 units per year required.

Owned Accommodation

Homeownership has long been favoured as an investment as well as for the accommodation it provides. The prospects of capital gains or fears of losing out have attracted many into the housing market. This attraction has been enhanced by the exemption of principal residences from the capital gains tax. However, with high interest rates and a relatively tight monetary policy, the prospects for real capital gains are not as favourable, and housing may no longer look like such a good investment. High interest rates raise the cost of homeownership and depress the demand for owned housing.

The impact of high interest rates on the cost of homeownership can be better understood with the aid of an example. The average income of families borrowing for new housing under the National Housing Act was $17,433 in 1976. If in 1976 a family with this income had bought a house costing $37,877 (the average price for a house financed in that year under the NHA), with a downpayment of 10 per cent or $3,788 and a mortgage financed at 11.75 per cent (the average rate for the year), its monthly payments would have been $346, or 23.8 per cent of its income. Property taxes of $613 per year would have raised the monthly payment to 27.3 per cent of income. In 1981 a similar family would have had an income of $36,712; its house would have cost $63,370; a 10 per cent downpayment would have been $6,337; its mortgage rate 18.25 per cent; and its monthly payments $847, or 27.7 per cent of its income. Property taxes of $843 per year would have brought the monthly payment for principal, interest and taxes up to 30 per cent of income. As a proportion of income, this would have represented an almost 10 per cent increase in the basic monthly carrying charge. An increase of this magnitude might be sufficient to keep many prospective buyers out of the market. At higher interest rates, such as have been experienced at certain times in the recent past, the increase would have been even greater, as would the number of prospective buyers affected.

The government has introduced a Canada Mortgage Renewal Plan to help homeowners who must renew their mortgages at a rate of interest requiring more than 30 per cent of their income to pay principal, interest and taxes. The plan initially provided only interest-deferral guarantees of up to $3,000 to borrowers with equity. In the June 1982 budget the program was extended so that homeowners facing difficulty due to mortgage renewal are now eligible for a nontaxable cash grant of up to $3,000. The expiry date was also extended and the program now covers mortgage renewal between September 1, 1981 and December 31, 1983. While helpful in preventing situations where homeownership is threatened by high interest rates at the time of mortgage renewal, the plan was not designed as a comprehensive government response to the problems posed for homeowners and the homeownership market by high interest rates.

To further stimulate the housing market, a new program featuring $3,000 cash grants was introduced in the June 1982 budget. The grants are available to all purchasers of new houses on which construction starts before December 31, 1982, and to first-time buyers of an existing house for the remainder of 1982. Purchasers must provide a minimum downpayment of 10 per cent, and their house must be within the regional price ceilings established by CMHC. In the budget, it was estimated that 100,000 purchasers would be eligible for this grant. Not all of these purchases would be due to the grant. Officials have estimated that perhaps 25 per cent would be incremental.

An interesting aspect of the federal program is that it does not exclude purchasers who take advantage of provincial grants or subsidies. Some of the provincial governments have introduced mortgage assistance programs of their own; in conjunction with the federal program they offer quite substantial benefits to selective home purchasers. Saskatchewan is offering a subsidy to bring the effective interest rate down to 13.25 per cent on mortgages of $50,000 or less. The Quebec government has similarly guaranteed a mortgage rate of 13.5 per cent over the next three years for purchases of new housing. The subsidy would be shared by the government, employers and employees in the construction industry, the Mouvement Desjardins and the chartered banks. The Quebec government expects this program to increase housing starts by 50,000 over the next two years. British Columbia offers grants of up to $2,500 for first-time home purchasers. And Ontario recently introduced a program which provides $5,000 interest-free loans, repayable over 15 years, for purchases of new homes. Alberta and Manitoba have also introduced or expanded mortgage loan or assistance programs.

Rental Housing

For rental accommodation, the story is similar but the actors are different. The landlord rather than the tenant faces the immediate impact of high interest rates. With such rates, investment in rental construction without government support does not look like a paying proposition. There is thus a shortage of equity capital for rental developments. A wide gap has opened up between rents and the operating and financing costs of new units. Rents on existing units tend to increase only sluggishly due to rent controls and other institutional characteristics of the rental housing market. The large share of owner's equity in older buildings and mortgages taken out at earlier, lower rates serve to hold down rent increases. At 18 per cent plus mortgage rates, rents may equal only half the costs of a new project. Not many new rental units will be built on these terms.

Private rental construction has been sustained in the face of high interest rates and rent controls by government assistance and inflation. The Multiple Unit Residential Building Program (MURB) and related tax incentives provided individual investors with additional tax write-offs to enhance cash flow in the critical early years of a project's life. Provincial governments in Alberta and Ontario have offered low-interest or interest-free loans to finance rental construction.

The November 12, 1981 budget allowed the MURB program to expire on December 31, 1981. It also introduced some other tax changes that made investment in rental projects less attractive. One change was a requirement that "soft costs" (which include expenses such as promotion, legal and accounting fees, mortgage fees, interest during construction, and property taxes) be capitalized rather than written off in full immediately. Another change was a limitation on the deduction of interest cost from taxable investment income, with any excess being either carried forward or halved and treated as a capital loss against up to $2,000 of other income.

Transitional arrangements governing these tax changes were announced following the budget on November 17, 1981 and on December 18, 1981. The first announcement cleared the way for the 1981 MURBs already in the works to continue without being affected by the tax changes. The second permitted a full write-off for projects at an advanced stage of planning. A two-year transition for interest falling into the restricted category was also provided. For 1982 any restricted interest could be deducted against a maximum of two thirds of a taxpayer's income and for 1983 against a maximum of one third.

The government replaced MURBs with the Canada Rental Supply Plan, an incentive program for the construction of new rental units. It offers an interest-free loan of up to $7,500 per rental unit for 30,000 units allocated to areas of the country with tight rental markets. In the June 1982 budget, the federal government indicated it was prepared to increase the amount of the interest-free loan if this were necessary to reach its commitment of new rental construction. The government also increased to 27,500 from 25,000 the number of units scheduled to be provided this year by CMHC under its nonprofit and cooperative housing program.

Government assistance for rental construction is helpful. But there is no way to avoid the fundamental reality that substantial rent increases will be required to bring rental supply into balance with rental demand. Rent increases would help to resolve the availability problem for apartments, but low- and moderate-income renters would be hit hard, making it more difficult for them to afford adequate housing. One way out of such a dilemma would be to cushion the impact of rent increases with a shelter allowance equal to some proportion, say 50 to 75 per cent, of the excess of monthly rent over 30 per cent of income. Such a program has been raised for consideration, most notably by the Minister responsible for CMHC, among others. A drawback in the current period of fiscal restraint is its cost, which was estimated at $333-415 million.[17] But it may be the best way to cushion the required rent increases.

More Flexible Mortgage Instruments

With high inflation and high mortgage interest rates, there is a "tilt" effect whereby real mortgage interest payments are much higher in the early years of a mortgage. This causes cash flow problems for both homeowners and rental entrepreneurs. An important initiative the government took to provide relief is the Graduated Payments Mortgage (GPM). This NHA-insured mortgage instrument, first offered in 1978, has a payments schedule which, in the first year, is roughly $2.25 less per month per $1,000 of loan value than a conventional mortgage. Thereafter, payments escalate by 5 per cent each year until they are sufficient to amortize the mortgage over the remaining term to maturity. The GPM reduces the effective mortgage interest rate paid by almost 3 percentage points in the first year. The deferred interest is added to the principal on which interest is paid in later years.

The GPM goes some way toward alleviating cash flow problems associated with high mortgage interest rates. For this reason, it has become a very popular financing instrument, particularly for rental projects; it has provided financing for more than half the units in recent years. However, it was developed when the mortgage rate was 10.5 per cent, and it does not provide the same degree of relief at a rate of 18 per cent plus. Thus mortgage instruments that allow for a greater degree of interest deferral may be required.

Another related problem is that the high level and volatility of interest rates have made many reluctant to lend for a term greater than a year. This transfers the burden of interest rate uncertainty to the borrower. New mortgage instruments, such as equity participation mortgages and share appreciation mortgages, have been proposed as a better means of sharing the burden of uncertainty. Another new instrument is the variable rate mortgage. While it does not reduce the interest rate uncertainty for borrowers, it does provide them with a guarantee of funds for the term of the mortgage.

Recent amendments to the National Housing Act gave CMHC the flexibility to adjust its mortgage insurance premium and to offer new mortgage instruments. This will put CMHC in a position to facilitate the new and more innovative kinds of mortgages required in the current inflationary environment.

A paper released in conjunction with the June 1982 federal budget outlines a scheme to deal with the effects of inflation on the allocation of funds to housing, and to a number of other sectors. The proposals involve the establishment of indexed term deposits, on which interest earnings would be taxable only to the extent they exceed the prevailing rate of inflation. The reduced tax rate would allow lower interest rates to be charged for the use of these funds. The major beneficiaries are intended to be new homeowners, small businessmen, farmers and fishermen. While this proposal would increase the availability and reduce the costs of mortgage funds to new homeowners, it has much more far-reaching implications for the allocation of the economy's savings. The proposed scheme requires careful examination of and attention to its overall effects on economic efficiency and equity.

Prospects

Housing construction is likely to remain relatively weak because of high real mortgage rates and slow growth in real personal disposable income. For the situation to improve significantly, nominal mortgage rates will have to come down more quickly than inflation so that real mortgage rates will decrease. If real mortgage rates were to increase further, a crisis in the availability and affordability of housing could develop. Residential construction could be even weaker than forecast.

The Current Account of the Balance of Payments

Canada has traditionally run a deficit on current account and been dependent on the savings of nonresidents to help finance capital formation. Since 1950, there have been only four years when the current account has not been in deficit (1952, 1970, 1971 and 1973). But as we pointed out in our review of balance of payments developments in Chapter 1, the deficit increased sharply in 1981 to $5.3 billion as the surplus on merchandise trade decreased and the deficit on services increased markedly. This provoked considerable concern that a fundamental deterioration in Canada's balance of payments was under way. In this section, we address this concern. In Chapter 5 we provide a different perspective on the issue in our examination of monetary policy and international capital flows. This is important because much of the deterioration in the current account balance last year resulted from the surge in interest payments abroad caused by capital flows associated with energy takeovers.

The conclusion from our analysis of the current account balance in this section is that for the present concern is exaggerated. But we do believe that it is very important to be aware of the significant challenges Canada will face in its future trading relations and of the factors that may adversely influence Canada's medium-term balance of payments prospects.

The current account deficit in 1981, while the largest on record in absolute terms, was not unusually large relative to the size of the economy; it amounted to 1.6 per cent of GNP. This was lower than most years since the mid-1970s, when it was around 2 per cent. There were two notable exceptions – 1975, when the current account deficit relative to GNP was almost 3 per cent, and 1980, when it was only 0.4 per cent. The current account was atypically strong in the early 1970s. The recent performance, however, does not show up poorly when viewed from a longer historical perspective. The deficit is marginally higher than in the 1960s, when it averaged 1.5 per cent of GNP, but much lower than in the 1950s, when it averaged in excess of 2.5 per cent of GNP.

The unexceptional nature of Canada's recent performance shows up even more clearly when we adjust for the effects of inflation on Canada's overall use of foreign savings. While deficits on current account must be financed through imports of foreign capital, which adds to Canada's level of foreign indebtedness, inflation reduces the real value of Canada's nominally fixed foreign debt. The significance of the current account balance as an indicator of Canada's real dependence on foreign savings is therefore quite different now from what it was in less inflationary times. Table 3-5 provides an estimated inflation adjustment for the current account balance. In column 1 the current account balance has been proxied by net savings of nonresidents on a national accounts basis. These figures were then adjusted to reflect the extent to which inflation has reduced the value of the fixed price assets held by nonresidents. When the result is expressed as a percentage of GNP (as in column 3), it can be seen that the real burden associated with Canada's use of nonresident savings was not excessive in 1981 or in the immediately preceding years.

While the balance on goods and services has not deteriorated as much as a superficial reading of the figures would suggest, there are nevertheless some troubling undercurrents to Canada's recent performance. The high level of foreign borrowing in recent years ensures a continuing strong growth in Canada's interest obligations to nonresidents. This will be exacerbated if the government continues to pursue its targets for the Canadianization of the oil and gas industry. More significant for Canada's debt burden is that recent borrowings, unlike those in earlier years, have been at interest rates that will probably fully

Table 3-5

Effect of Inflation on Savings by Nonresidents as a Proportion of GNE, Canada, 1970-81

	Savings by nonresidents[1]		
	Net amount	Proportion of GNE	Proportion of GNE after inflation adjustment[2]
	($ Millions)	(Per cent)	
1970	-916	-1.07	-1.31
1971	-184	-0.19	-0.33
1972	667	0.63	0.41
1973	242	0.20	-0.29
1974	1,999	1.36	0.84
1975	5,252	3.18	2.75
1976	4,388	2.30	1.75
1977	4,756	2.28	1.72
1978	5,299	2.30	1.58
1979	5,506	2.10	0.40
1980	1,991	0.68	-0.98
1981	6,477	1.95	0.18

[1] As defined in the National Income and Expenditure Accounts and equal to the negative of the current account balance in the balance of payments, excluding inheritances and migrants' funds.

[2] That is, after measuring the effects of inflation on the value of the stock of fixed-price assets held by nonresidents and reducing the savings figures accordingly.

SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada.

compensate nonresidents for the erosion in the real value of their savings. In addition, labour costs have begun to increase more rapidly in Canada than among our trading partners, and there is evidence that Canada is starting to lose some of the gains in international competitiveness achieved during and after the controls period. There is, therefore, certainly reason to reflect upon the likely course of Canada's current account balance in coming years.

Services

Canada's deficit on service transactions has grown almost continuously over the past 30 years, but the rate of increase has accelerated since the mid-1970s. The deficit has grown in relative terms as well, and with the sharp increase recorded in 1981 it stood at an unprecedented 3.8 per cent of GNP.

The increase in the service deficit can be explained largely by Canada's growing level of net indebtedness. The rise in Canada's service payments mirrors the growth in portfolio and direct investment in Canada by nonresidents. Table 3-6 shows movements in the various components of the service deficit. Between 1974 and 1979 net interest payments increased very rapidly due to the heavy borrowing by provincial governments and utilities, and the additional debt financing costs arising from the depreciation of the Canadian dollar. Net interest payments have grown more slowly since then, although increased provincial borrowing combined with high interest rates did lead to a significant widening of the interest deficit in 1981. To account fully for Canada's deficit on interest income, it is necessary to incorporate interest payments and receipts on investments other than bonds; such interest flows are the main component of what is termed "miscellaneous income." In 1981 the deficit on miscellaneous income more than doubled due to high interest rates and heavy foreign currency borrowings by Canadian banks, mainly to help finance the acquisition of foreign-owned companies.

Table 3-6

Canada's Balance of Trade in Services, 1970-81

	Investment income							
	Interest	Dividends	Miscellaneous	Total	Travel	Freight and shipping	Other	Total services, excluding transfers
				($ Millions)				
1970	-503	-519	-95	-1,117	-216	20	-517	-1,830
1971	-535	-606	-165	-1,306	-202	-12	-600	-2,120
1972	-605	-443	-216	-1,264	-234	-74	-668	-2,240
1973	-679	-581	-242	-1,502	-296	-66	-785	-2,649
1974	-686	-867	-372	-1,925	-284	-224	-843	-3,276
1975	-974	-979	-249	-2,202	-727	-433	-859	-4,221
1976	-1,566	-932	-337	-2,835	-1,191	-150	-1,080	-5,256
1977	-2,457	-1,201	-360	-4,018	-1,641	-26	-1,225	-6,910
1978	-3,158	-1,538	-671	-5,367	-1,706	131	-1,429	-8,371
1979	-3,685	-1,556	-1,333	-6,574	-1,068	309	-1,648	-8,981
1980	-3,947	-1,437	-1,579	-6,963	-1,228	536	-2,032	-9,687
1981	-4,530	-1,944	-3,840	-10,314	-1,116	487	-2,199	-13,142

SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada.

Net dividend payments have continued to increase, though they now constitute a significantly smaller component of Canada's overall service deficit than in the mid-1970s. While flows of direct investment into Canada have moderated in recent years – and were negative in 1981 – Canada's indebtedness on direct investment has continued to expand at a substantial pace as a result of the ongoing reinvestment of earnings by foreign-owned firms. Not only has the stock of foreign direct investment grown; dividend levels have increased as well, being pulled higher by strongly rising bond yields.

Negative balances on travel and "other services" have contributed to the overall service deficit. The travel deficit was relatively insignificant through the 1960s and early 1970s, but it has remained above $1 billion since 1976 due, in part, to the increased popularity of southern winter vacations. The deficit on other services has grown mainly because of increased payments by Canadian firms for commercial services, including professional services, copyright, royalties and registered trademarks. A high proportion of these payments are made by foreign subsidiaries, and the outflows have increased in keeping with the growing activity of foreign-owned firms in Canada.

Canada's deficit on services will continue to increase in coming years because of the country's growing net indebtedness, including particularly our rising stock of portfolio debt. An easing in domestic and especially international interest rates could lead to some moderation in the growth of interest payments but, alternatively, a further depreciation in the Canadian dollar could make Canada's debt obligations more costly. In assessing the consequences of Canada's rising service deficit, it is important once again to consider the distorting impact of inflation. Since part of the interest paid to nonresidents is intended to compensate them for the erosion in the real value of their capital – and is therefore actually a repayment of capital – the true servicing costs associated with Canada's fixed debt are much lower than suggested by official data.

Over the past two years Canada's interest indebtedness to foreigners has grown sharply as a direct result of the repatriation of foreign-owned assets by Canadians. In 1981 this involved the purchase from nonresidents of $7.5 billion of their controlling interests in Canadian businesses. The repatriation of foreign-owned companies impacts on the current account in a number of ways. To the extent that some of the funds for the purchase of nonresident equity are raised in the domestic market and an associated capital outflow occurs, pressures will be generated for a compensating improvement in the current account. The purchase of foreign-owned firms may to some extent displace new investment in Canada and result in lower growth in income and a corresponding decline in imports. The capital outflow is also likely to lead to downward pressure on Canada's exchange rate, and the resulting depreciation will stimulate exports and discourage imports. These pressures for improvement in the current account will continue until there is a transfer of real resources corresponding to the transfer of financial resources effected by the capital outflow.

Apart from the impact of the capital outflow, there is the longer-term implication of the shift in the nature of Canada's foreign indebtedness. The acquisition of foreign-owned companies has slowed the growth in Canada's overall direct investment indebtedness, while contributing to an acceleration in the growth of portfolio indebtedness. Since the payments on portfolio debt are higher in the short term and probably the medium term, the immediate effect will be to increase the size of Canada's deficit on services. For example, if interest rates exceed dividend yields by 15 percentage points – a not unrealistic assumption for 1981 – then the takeovers in 1981 would initially raise debt servicing costs by $1.1 billion. This comparison is misleading, however, because the return to nonresidents on their direct investment consists not just of dividend payments, but also of retained earnings and any inflation-related appreciation in their capital assets. Dividend payments to nonresidents would likely grow over time in line with the growth in the activity of foreign-controlled corporations, and at some point would exceed the interest payments on the $7.5 billion in portfolio debt. The net effect of the change in debt composition on Canada's longer-term financing costs is thus not at all certain.

Merchandise Trade

Canada's merchandise trade balance has improved during the last two decades, with deficits in the 1950s changing to small positive balances in the 1960s and to substantial surpluses by the early 1980s. This long-term upward trend in the merchandise trade surplus has been punctuated by significant variation arising from cyclical developments in Canada and abroad and from changes in Canada's competitive position. Canada's competitiveness in international markets deteriorated significantly in the 1974-76 period, during which time labour costs increased more rapidly than in the United States and the Canadian dollar strengthened. Over the next couple of years Canadian labour costs were brought

Table 3-7

Canada's Trade Balance, by Commodity Group, 1976-81

	1976	1977	1978	1979	1980	1981
			($ Billions)[1]			
Food and related products	1.4	1.3	1.5	2.1	3.5	4.2
Crude material and related products	3.2	3.5	2.9	4.6	3.4	3.0
Fabricated materials	6.0	7.9	10.4	12.4	16.6	16.0
Automobiles and related products	-1.2	-1.2	-0.8	-3.3	-2.7	-2.9
Motor vehicles	1.3	2.1	2.6	0.8	1.5	1.9
Parts	-2.5	-3.2	-3.5	-4.1	-4.2	-4.8
Other end products	-8.9	-9.9	-11.6	-13.9	-15.1	-18.0
Reexports and special transactions	0.5	0.5	0.6	0.9	1.2	2.2
Total	1.0	2.2	3.1	2.8	6.9	4.5

1 On a customs basis

SOURCE Estimates by the Economic Council of Canada, based on data from Statistics Canada

into line as a result of controls and the depreciation of the Canadian dollar. These developments, along with the relatively fast pace of recovery in the United States, led to a marked improvement in Canada's trade surplus in 1977 and 1978. While the U.S. economy weakened in 1979 and 1980, this was more than offset by the strengthening in export prices and the partly related improvement in Canada's trade balance with Japan and the European Economic Community (EEC). After increasing strongly in 1980, Canada's trade surplus declined in 1981, largely as a result of the impact of weak economic activity in the industrial nations on commodity prices and thereby on Canada's terms of trade.

Table 3-7 portrays Canada's trade performance by major commodity group. The general pattern has been a deficit in manufactured end products which is more than offset by the combined surplus for food and related commodities, and for crude and fabricated materials. It is significant that although the deficit on end products has increased in absolute terms, it has not increased relative to the total volume of two-way trade in this category.[18] The most impressive performance in recent times has been that of the fabricated materials group, which comprises such semifinished goods as wood and paper products, chemicals, refined petroleum and coal products, iron, steel and nonferrous metal products. (It is often forgotten in discussions of Canada's manufacturing sector that these semifabricated goods are also manufactured, using production processes just as advanced as those in other manufacturing industries.) In 1981 Canada's trade surplus on fabricated materials declined for the first time in several years, while its deficit on end products widened substantially.

Among the more important contributors to recent developments are changes in Canada's competitiveness and shifts in its terms of trade. Broader factors affecting international trade barriers and the structure of world trade will also have an important bearing on Canada's merchandise trade in coming years.

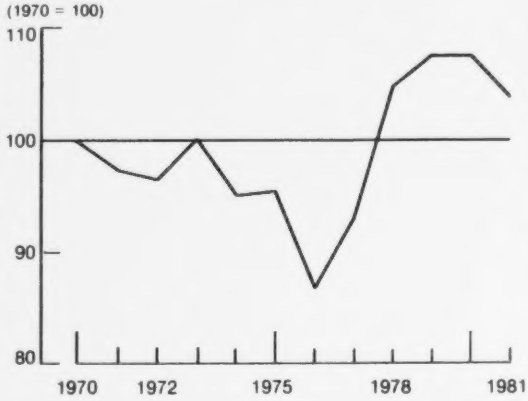
International Competitiveness

One of the most disappointing aspects of Canada's recent performance is the decline in international competitiveness. During the Anti-Inflation Program, the combination of more moderate wage increases and a lower-priced currency (in U.S. dollar terms) led to a dramatic improvement in international competitiveness. The gains achieved after 1976 more than offset the deterioration in Canada's competitiveness over the first half of the 1970s, and by the end of the decade Canada's manufacturing industries were in a much stronger position than they had been in a long time. Competitiveness deteriorated in 1981 as a result of the acceleration in domestic wages, the sharp rise in domestic energy costs, and the appreciation of the Canadian dollar relative to European currencies. Unit labour costs advanced more rapidly in Canada in 1981 than they did in the United States, Japan and most European countries. Exchange rate movements roughly eliminated differences between the growth of Canadian and U.S. labour costs in 1981, but they greatly widened the gap between the pace of Canadian and European labour costs.

The competitiveness index in Chart 3-2 compares unit labour costs in Canada with those of its 10 principal trade competitors, all in terms of U.S. dollars.[19] The figure portrays the sharp improvement in Canadian competitiveness in 1977 and 1978, and the further slight gains in 1979 and 1980. On the basis of this index, the international competitiveness of Canada's manufacturing sector declined by 3.7 per cent in 1981.

Chart 3-2

Competitiveness Index, Canada, 1970-81



Source Data from Department of Finance Canada.

Table 3-8 provides a slightly different perspective on Canadian labour costs. This table highlights how exchange rate movements, along with variations in rates of labour compensation, have worked to Canada's benefit over the past decade. While in the early 1970s hourly wage compensation in Canada was second only to that in the United States, by the end of the decade six of the ten industrial countries in the table had wage costs (in U.S. dollars) higher than Canada's. On the other hand, manufacturing costs in Japan are less than two thirds of those in Canada. Even more striking, compensation levels in the more advanced developing countries are only one eighth to one third of those in Canada.

The data on compensation levels underscore the competitive advantage enjoyed by the newly industrialized countries, particularly in standard technology products. Of more immediate concern, however, is the recent deterioration of Canada's competitive position vis-à-vis the main industrial trading nations. This deterioration was probably one element underlying the major movements of speculative capital last year and the associated downward pressure on the Canadian dollar. The danger is that a continuation of recent trends could lead to the need for a more fundamental correction in the external value of the Canadian currency.

Table 3-8

Estimated Hourly Compensation[1] of Production Workers in Manufacturing, Canada and Other Industrial and Newly Industrialized Countries, 1970-81

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
						(U.S. dollars)						
Industrial countries:												
Canada	3.46	3.91	4.31	4.66	5.45	6.11	7.20	7.54	7.69	8.15	9.04	9.86
United States	4.18	4.49	4.84	5.26	5.75	6.35	6.93	7.59	8.30	9.08	10.00	11.06
Belgium	2.06	2.44	3.16	4.19	5.12	6.54	7.03	8.46	10.39	12.02	13.18	11.13
France	1.72	1.93	2.34	3.08	3.41	4.58	4.76	5.31	6.54	7.90	9.23	8.28
Germany	2.33	2.76	3.34	4.56	5.32	6.19	6.60	7.79	9.65	11.26	12.26	10.47
Italy	1.74	2.10	2.55	3.17	3.62	4.60	4.38	5.08	6.09	7.19	8.26	7.59
Netherlands	2.12	2.55	3.13	4.28	5.33	6.53	6.98	8.15	9.98	11.47	12.17	10.25
Sweden	2.93	3.23	4.03	4.93	5.63	7.18	8.21	8.85	9.65	11.33	12.51	11.88
United Kingdom	1.49	1.74	2.03	2.25	2.60	3.27	3.12	3.35	4.28	5.50	7.37	7.43
Japan	0.99	1.18	1.58	2.19	2.67	3.05	3.30	4.03	5.54	5.49	5.61	6.23
Newly industrialized countries:												
Mexico	..	..	..	..	..	1.89	1.95	1.75	2.01	2.34	2.97	3.65
Brazil	..	..	..	..	..	1.13	1.29	1.46	1.67	1.73	1.70	2.14
Korea	..	..	..	..	..	0.37	0.47	0.63	0.86	1.14	1.09	1.17
Hong Kong	..	..	..	..	..	..	..	..	1.13	1.25	1.30	1.40
Taiwan	..	..	..	..	..	..	..	..	0.80	1.01	1.27	1.52

[1] Total hourly compensation includes all payments made directly to the worker (pay for time worked, pay for vacations and other leave, all bonuses, and pay in kind *before* payroll deductions of any kind). It *also includes* "fringe benefits" such as employer expenditures for social security, insurance, and so on. The information is derived from periodic labour cost surveys, prorated to intervening years. Small differences in compensation levels should not be considered significant. Total compensation is computed per hour worked.

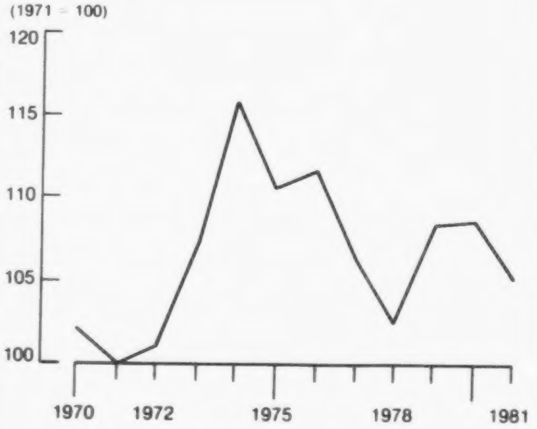
Source U.S. Department of Labor, Bureau of Labor Statistics, Office of Productivity and Technology, July 1982 (unpublished data).

Terms of Trade

A maintained improvement in the terms of trade between natural resources and manufacturing goods – which we will call the commodity terms of trade – is a critical assumption underlying the government's economic development strategy, as will be discussed further in Chapter 4. This has implications for the terms of trade between exports and imports, closely related because of the composition of our trade flows. This latter concept can be called the international terms of trade. Canada's international terms of trade followed a generally downward course over the late 1970s, though this decline was from an extraordinarily high peak reached at the apex of the 1973-74 commodity price boom (Chart 3-3). The ratio of export to import prices improved in 1979 and 1980 but then declined again, so that in 1981 the ratio was well below the peak attained in 1974. Recent movements in the terms of trade are to some extent the flip side of changes in Canada's competitiveness. The depreciation of the Canadian dollar, which contributed to a major strengthening of Canada's competitiveness in 1977 and 1978, was a key factor in the substantial deterioration in Canada's terms of trade over these same two years. The subsequent improvement in 1979 was related to the strengthening in world commodity prices in general, and in prices for Canadian exports of wheat, crude oil, natural gas, petroleum products, metals and minerals in particular. The decline in industrial prices, in tandem with the weakening in economic activity in both Europe and North America, was responsible for the most recent drop in Canada's terms of trade.

Chart 3-3

Canada's Terms-of-Trade Index, 1970-81



SOURCE *Bank of Canada Review*, various issues.

Future movements in the terms of trade will be determined by the course of both domestic production costs and relative world prices for manufactured goods and raw materials. Because Canada's exports are heavily weighted toward raw materials and semiprocessed goods and its imports consist mainly of manufactured goods, and because all imports and a substantial share of exports are traded at world prices, the country stands to gain from developments that lead to an improvement in the price of raw materials relative to manufactured goods in world markets. It has been estimated that a 10 per cent increase in the relative price of raw materials leads to an increase of about 2 per cent in Canada's overall terms of trade.[20] While the prices of Canadian imports and Canadian raw material exports are determined by world prices, the prices of Canadian manufactured exports are influenced to an important degree by domestic costs and demand pressures. An increase in domestic costs leads to higher prices in those export markets where Canadian producers have some pricing discretion, and thereby to an increase in Canada's terms of trade. An appreciation of the exchange rate also tends to improve the terms of trade by inducing a much greater reduction in import prices than in export prices. A deterioration in Canada's competitiveness resulting from either an increase in Canada's unit labour costs (relative to U.S. costs) or an appreciation in the exchange rate could result in an improvement in the terms of trade of up to 30 per cent of the change in competitiveness in the short run and 10 per cent in the long run, according to a recent analysis.[21]

Fluctuations in the terms of trade can be expected to continue to exert an important influence on the value of Canadian merchandise exports and imports in the 1980s, as they did in the 1970s. Indeed, Canadian trade could become even more vulnerable to fluctuations in world commodity prices if federal initiatives to encourage the growth of resource-based industries have a significant impact. While it is impossible to predict accurately the longer-term course of international prices, the immediate prospect – for the period up to about 1985 – is for an improvement in Canada's terms of trade.

The current deterioration in commodity prices appears to be ending, and the expected strengthening of the North American and European economies in 1983 and 1984 offers the prospect of a significant improvement in the prices of Canadian raw material exports. It will be particularly important in coming years to recognize changes in the value of Canada's trade stemming from fluctuations in the terms of trade and not to confuse these changes with those resulting from trade volume and international competitiveness, which could have longer-term and more far-reaching implications for the strength of Canada's current account.

Trade Barriers

With exports accounting for more than 25 per cent of GNP, Canada is critically affected by changes in the international trading environment. Developments in recent years have highlighted the widespread ambivalence of the major industrial nations toward increased trade liberalization. Through the Tokyo Round of multilateral trade negotiations, GATT nations agreed to implement major reductions in international tariffs. But current economic difficulties have sparked a renewed interest in measures to protect jobs and shelter domestic firms from import competition.

The implementation of the Tokyo Round of tariff cuts will significantly influence Canada's trade prospects commencing in the latter part of this decade. At the end of the staging period in 1987, when all agreed reductions have been made, 80 per cent of all current Canadian exports to the United States will be able to enter duty free and over 90 per cent at a tariff of 5 per cent or less. The trade-weighted average of import duties levied by Canada is to fall to 7.9 per cent at the end of the adjustment period. Canada will experience a somewhat greater decline in protection than the other major trading nations, though Canadian tariff rates will continue to exceed average levels in the United States, Japan and the EEC. The Tokyo Round changes will necessitate some difficult adjustments, but they will also present Canadian producers with some major new export opportunities. While there is a danger in exaggerating the size and significance of the tariff reductions that have been negotiated, they will provide some firms with opportunities for longer production runs and related economies of scale. Inefficiencies associated with the small size of the Canadian market can be overcome if firms can produce for global markets.

Of potentially greater significance to Canada in the medium term, however, are developments tending to expand the degree of trade protection. The increasing importance of trade blocs is one trend adversely affecting Canada's trade prospects. The growth of the EEC and the preferential arrangements existing not only among EEC countries but also extending to other members of the European Free Trade Association (EFTA), have greatly impeded the access of Canadian manufactured goods to West European markets. Canadian exports of processed and fabricated products have also had to contend with a growing array of tariff and nontariff barriers. While the arrangements in Japan which discourage upgrading of Canadian mineral exports have been of particular concern, there has recently been an increase in similar protective arrangements in other countries, including South Korea, Taiwan and Brazil. Canadian exports are also being threatened by the popularity of contractual arrangements (such as the "Lomé II" agreement between the EEC and the ACP countries in Africa, the Caribbean and the Pacific area) designed to provide some major industrial countries with increased security of supply of important commodities.

More generally, in recent years there has been a growing resort to nontariff barriers. The GATT has always had difficulty in addressing nontariff issues. Although the Tokyo Round attempted to establish some codes for the use of nontariff measures, it is generally agreed that this will continue to be a problem area.[22] In the United States an elaborate mechanism has been put in place to ensure that domestic producers can obtain "emergency" protection in times of severe difficulty. In recent years the United States has also extended the degree of "procurement protection" provided to domestic industry. Federal and state laws and regulations stipulating a certain level of U.S. content have severely hurt a number of Canadian firms.

While Canada has been affected by the import restrictions of other countries, it also has some of its own. Export restraint agreements have been worked out with Japanese auto producers and a number of low-cost producers of textiles and clothing, and quotas have been established to limit shoe imports. Canada has much at stake, and stands to lose more than it would gain from an escalation in trade barriers. This is underscored most clearly, perhaps, by the current pressure in the United States for legislation to authorize the President to take retaliatory action when he feels U.S. firms are being unfairly treated.[23] While seriously restrictive reciprocity legislation may never be enacted, the prospect of increased protectionism in the United States is certainly worrisome.

Current Account Outlook

The deficit on the service component of Canada's current account has increased consistently since 1967. The continuing growth in Canada's foreign indebtedness will likely further increase the deficit in coming years. At best one may hope that a moderation in interest rates, combined with reduced takeover-related foreign borrowing, will result in a slower growth in Canada's service deficit than occurred in 1981. The main question, then, centres on the likely course of Canada's merchandise trade balance – whether growth in the merchandise surplus will offset the rise in the service deficit or at least be sufficient to prevent the current account deficit from increasing in importance.

There are some positive elements but also some significant risks colouring the outlook for Canadian trade. The data that are available suggest that, due to the weakness of the economy and the resulting sluggishness of imports, we may be heading for a record trade surplus this year. In 1983 and 1984 the U.S. economy is projected to recover from its current slump and this bodes well for Canada's medium-term trade prospects. The growth of real exports may exceed that of imports in 1983 if, as is quite possible, Canada's recovery lags that in the United States. Likely to be more important in coming years, however, are the implications for Canada's terms of trade of a strengthening in business activity in the United States and in Europe. There is already some indication that the decline in commodity prices has bottomed out. The expected recovery in industrial activity should lead to substantially improved prices for Canadian raw material and semifinished exports, and it suggests the possibility of a much higher merchandise surplus over the next few years.

The negative factors affecting Canada's trade prospects include the relatively rapid pace of Canadian costs and its impact on the competitiveness of Canadian manufacturing, the growing threat posed by the newly industrialized countries, and the emergence within the industrial nations of some strong protectionist sentiment that could threaten the considerable progress made toward increased trade liberalization. The largest cloud on the horizon concerns the rapid rise in domestic labour costs. The decline that has occurred this year in the value of the Canadian dollar (in U.S. currency) has helped to compensate for the recent deterioration in Canada's competitiveness. However, a more substantial downward adjustment would be necessary if Canadian cost increases are not brought into line. As has already become evident, a depreciation of the Canadian dollar is not a painless corrective. A depreciation could help restore Canada's competitiveness, as it did in 1977 and 1978, but it would also adversely affect the terms of trade and increase the costs of financing Canada's large foreign-held debt. A depreciation sufficient to correct a pronounced disparity between domestic and foreign production costs and to bring about a significant overall improvement in Canada's current account would add considerably to cost pressures within Canada and make it more difficult to arrest inflation.

These crosscurrents are reflected in the outlook for specific trade sectors; a number of industries face very favourable prospects while others are beset by continuing uncertainty. The immediate outlook for natural gas is especially promising. Natural gas exports have been running well below allowable levels, due in part to the stiff competition from relatively cheap heavy fuel oil in U.S. industrial markets. But exports now seem well established on an upward course and, with the expected pickup in industrial activity in the United States and promising opportunities in a number of overseas markets, some impressive gains in natural gas exports are foreseeable – although the timing and size of these gains will be affected by the course of gas deregulation in the United States. At the same time, the continuing weakness in world oil prices should help to restrain the growth in the value of Canada's oil imports. A number of Canada's fabricated material exports, including especially lumber and nonferrous metals, should also experience rapid growth in coming years. Lumber exports have declined substantially since 1979 and would receive a much-needed stimulus from a pickup in U.S. housing activity. The outlook for Canadian wheat exports is more uncertain. These declined marginally in 1981, although they continued to run at a high level by historical standards. Export volume is up this year but world wheat prices have declined; this may prevent the achievement of a higher value for Canadian exports during 1982 and at least part of 1983. Depending on harvests in the U.S.S.R. and the success of U.S. efforts to reduce wheat acreage, however, export prospects could improve in subsequent years.

The outlook for Canada's trade in automotive products is also somewhat problematic. The deficit in automotive products increased to $2.9 billion in 1981 (from $2.7 billion in 1980), mainly as a result of the exceptionally large (72 per cent) increase in automobile imports from Japan. Canada's deficit in automotive trade with the United States has declined over the past few years, although the deficit in the motor vehicle parts segment has continued to widen. Canada's overall deficit in parts was up to $4.8 billion in 1981 (Table 3-7). North American automobile sales generally have been severely depressed for an unprecedented three years, with replacement demand (or the scrappage rate) falling to a record low. The combination of an improved economic climate, stronger growth in personal income and a more moderate upward pace in automobile operating costs could well lead to a substantial strengthening in automobile sales in coming years. The Canadian industry's participation in this growth, however, is quite likely to be constrained by a number of factors – including, particularly, comparatively high labour costs (with hourly compensation in Canadian plants exceeding that in Japan by over 50 per cent)[24] and the relatively recent expansion of the North American industry into the market for smaller cars. We expect that Canada's trade balance in automobile products will continue to reflect these problems.

In general, we believe that the positive factors at work will be strong enough to yield a significant improvement in Canada's trade performance in coming years. In spite of this, it is likely that the current account deficit will edge upward in the medium term. The present year, with its exceptionally strong trade performance and the real possibility of a decline in the current account deficit, is not indicative of medium-term prospects. In coming years it is difficult to foresee the growth in the merchandise trade surplus offsetting the expected increase in the services deficit, given, particularly, the much higher base from which the latter will be expanding. But while the current account is likely to be higher in absolute terms by the mid-1980s, it may not and need not increase as a proportion of GNP. An improved trading environment in conjunction with more strenuous efforts to keep domestic costs in line should allow us to keep the current account deficit from increasing in importance. This should be possible, moreover, without major exchange rate adjustments. While there is a need to monitor carefully Canada's trade in goods and services, there is a reasonable basis for optimism that the deficit in such trade can be kept within manageable proportions.

4 Federal Economic Development and Energy Policies

Throughout its history Canada has had a mixed economy. In some sectors government policy has had no significant impact, but at the other extreme and in other sectors, governments themselves are the producers and distributors. In between these extremes many different government sector/private sector interrelationships exist. Canadian governments have generally had a view about the feasible and desirable structure of the Canadian economy. Whether output should be as concentrated in staples; whether the country ought to promote a more open economy or move toward greater protection; whether economic activity should move jobs to people or vice versa; whether the country should actively promote research and development; whether the government should take an aggressive or benign view of foreign ownership and control – on all these questions each Canadian government has had a view.

Government views about economic development policies do not tell the whole story. Also important is the level of specificity or generality embodied in governments' policies. Significant too is the degree of vigour and singlemindedness applied in the pursuit of these policies, as well as the extent to which a "hands on" or interventionist approach is followed rather than a more free market approach. The choices of government structural economic policies can have profound effects on the pace of economic growth, on the efficiency in the utilization of the nation's resources, on the structure of industry and foreign trade, on the regional location of activity, on the distribution of income and wealth, and on the flexibility and adaptability of the economy.

In recent years, and particularly since June 1980, Canada has undergone a number of major changes in governments' approaches to these matters. New economic and energy policies have meant new views on development opportunities and preferred paths. Moreover, there have been shifts by governments in the vigour and singlemindedness displayed in the promotion of the goals of economic development, as well as in the instruments and machinery chosen to pursue them. If only because these changes may have major implications for the medium-term performance of the Canadian economy, exposition and examination of them would be appropriate in this Review. But there is another motivation: many signs suggest that rigidities, distortions and inflexibilities in the Canadian economy, both in the market and nonmarket sectors, have become an important part of the problem of slow growth, rising inflation, unemployment and general inefficiency and waste. Moreover, there are signs that impediments to the smooth working of the economy are often due to the accumulation of government regulations, protections and controls. A central question arises, therefore, about the extent to which economic development policy will be directed toward more government intervention almost for its own sake, rather than toward producing more flexibility and positive adjustment in both the market and nonmarket sectors.

Review of Economic Development Policies

Over the past two decades, the federal government has repeatedly sought to define and develop a general framework for promoting industrial and economic growth. This has involved an ongoing examination of Canada's likely future comparative advantages in the resource, manufacturing and service sectors. With trends emerging in the world economy toward greater specialization in production and considerable technological change in production processes, economic development has been confronted by the need for rationalization, restructuring and modernization in many sectors of the Canadian economy. Moreover, the size and nature of the domestic economy have made structural change a necessary goal. The challenge is to function efficiently and effectively not only in domestic markets, but also in competition with other mature industrial countries and with the newly industrializing countries of the Third World. To respond to this challenge will require not only a sound framework for federal economic development policies, but also federal-provincial cooperation and coordination of policies.

From the beginning of the 1960s to the early 1970s, federal policy focused mainly on the opportunities and problems of industry, particularly manufacturing. Federal programs were designed industry by industry with only some across-the-board incentives. The Auto Pact and defence-sharing agreements between Canada and the United States were important initiatives of this kind. The hope was that further development of the manufacturing sector would lead the Canadian economy to a more "mature" and productive position in the international economy, and would make it less reliant on its considerable endowment of natural resources. At the same time, there was concern about the problems of uneven economic development in the various regions of the country. Federal programs were designed under the Regional Development Incentives Act (1969) and by the Department of Regional Economic Expansion to attract industries to depressed areas and to develop the infrastructure needed for industry in these regions.

In the mid-1970s, while federal government economic development policies continued primarily to address industrial problems and opportunities, a more concerted attempt was made by the government to coordinate its activities and to develop more global development strategies. These trends were evident in the creation of an elaborate consultation mechanism with business and labour representatives in the form of 23 industry task forces, and in the formation of the federal Board of Economic Development Ministers (subsequently the Ministry of State for Economic Development). The consequence of greater emphasis on the need for coordination was the series of General Development Agreements with the provinces. These agreements were intended to improve the coordination of regional policies among the provinces, federal departments and the private sector by means of their specific subsidiary accords.

While many provincial governments have recently been reviewing their economic development policies,[1] the federal government has taken its own series of initiatives since its election in June 1980. These significantly alter the approach to the framework of economic development policies. In general, this government has recognized more explicitly than in the recent past the role of resource development and its crucial importance for broad economic development in Canada. Moreover, where previously the importance of coordination among governments was emphasized, this federal government has argued that the pendulum of power has swung too far in the direction of the provinces. As a result, it has sought to establish a greater federal presence and visibility in the making and administration of federal economic development policies. This approach puts less reliance on joint implementation of programs by the two levels of government.

These shifts in economic development policies were clearly shown in the government's approach to energy policy. To a considerable extent, the announcement of the National Energy Program (NEP) in 1980 heralded a new focus by the federal government on how Canadians could capitalize on the nation's energy base to build a more productive and efficient economy. The NEP also involved a clear demarcation of the federal presence in the energy sector. These changes were made even more explicit in a paper, released with the November 1981 budget, entitled *Economic Development for Canada in the 1980s*. The paper identified the leading engines of growth for Canada as the country's resource potential in the sectors of energy, agriculture, fisheries, forestry and mining. On January 12, 1982 the Prime Minister announced a reorganization of economic ministries that emphasized federal government intentions to administer and deliver economic and regional development programs with a greater degree of federal visibility.

These changes in emphasis in economic development policies deserve considerable attention and analysis for their medium-term implications; they have important consequences not only for restructuring Canada's resource sector, but also for the rationalization and modernization of the manufacturing and service sectors. These federal policies involve changes in the institutional arrangements affecting the delivery of economic and regional development programs. They have already undergone considerable scrutiny from a short-term vantage point. With economic performance worse than anticipated, particularly in the resource sector, the rationale behind the federal government's economic development and energy policies has come increasingly into question.

The Debate on Economic Development Policies

Economic Development for Canada in the 1980s sets out the federal government's policies and priorities for national economic development. This document builds a general framework of economic development around three major opportunities:

- the development of Canada's rich bounty of natural resources;
- the processing of resource products and the supply of machinery and equipment for resource production by the manufacturing sector; and
- the encouragement of industry based on high technology and innovation.

In discussing these opportunities, the federal government leaves no doubt that the natural resource sector is considered to be the major source of future economic growth.

Within the document itself, there is little evidence for this explicit emphasis on the resource sector other than the statement that there is "increasing world demand for Canada's major resources." Evidence supporting this claim can be found in the medium-term outlook prepared by the Ministry of State for Economic Development prior to the November 1981 budget. The basic theme of this paper relates to the terms of trade between natural resource commodities and manufactured goods. The paper stresses that during the past decade there has been an improvement in the comparative advantage of the production of basic commodities, especially compared with the production of standard manufactured goods. It also states that the change in the terms of trade is evident even when the price of energy is excluded. Finally, it argues that the change in the commodity terms of trade is "permanent" and therefore that corresponding policy changes appear warranted.

A major question raised by the federal government's economic development policies, therefore, is: has there been a permanent shift in the commodity terms of trade? (The prospects for the terms of trade are considered in Chapter 3.) Since it is difficult to predict the longer-term cause of international prices, it is perhaps helpful to outline the nature and breadth of the debate relating to this question. Prior to the 1970s, economists were primarily of the opinion that the commodity terms of trade had fallen and would continue to fall. This influenced economic development theory and led economists such as R. Prebisch, formerly of the United Nations Economic Commission for Latin America, to advocate strenuously the industrialization of economies. On the basis of this view of the commodity terms of trade, it was argued that industrialization was the best, and perhaps the only way for emerging developing countries to achieve permanent economic growth. While Canada has a long-standing tradition of policies aimed at encouragement of industrialization, beginning with the National Policy, such views influenced the country's economic development policies throughout the 1960s and 1970s. Consistent with these views, efforts were made to diversify the Canadian economy, particularly by providing support to the manufacturing sector.

During the 1970s, however, the "limits to growth" approach to economic development became popular. Its advocates, from such groups as the Club of Rome and the Conserver Society, argued that natural resource scarcity is a probable outcome of economic growth. This led them, and some economists, to take a different approach to economic development. While more pessimistic about economic growth in general, this approach entails a more bullish outlook for the commodity terms of trade. It can be argued that worldwide supply shortages in commodities will lead to real increases in their price levels. This view results in greater emphasis on the potential of the resource sector.

There are several economic questions commonly raised in opposition to the "limits to growth" view. Those who reject it stress that most projections of scarcity rely on a simple extrapolation of existing uses of commodities measured against the known supply. Many also argue that the possibilities of technological innovation, substitution for commodities and changes in other factors of production need to be taken into account. They thus suggest that the global economic system is open-ended, rather than severely limited. In addition, an important question concerns the relationship between rising prices and natural resource scarcity. For example, even if prices of resource commodities were to rise, it would not necessarily mean there was a scarcity of commodities and high demand. Rising prices can also reflect rising extraction costs.

There is some evidence that the "limits to growth" view underlies the federal government's economic development policies. Documents dealing with three natural resource sectors – agriculture, forestries and mining – were released by federal departments as background to *Economic Development for Canada in the 1980s*. In the agriculture paper, it is argued that severe food shortages may well occur and that real prices of food commodities will likely increase. (The document quotes the Global 2000 report prepared for the U.S. President, which suggests an increase in real food prices in the 21-63 per cent range by the year 2000.) And at the time of the preparation of the economic development paper, energy prospects associated with the NEP predicted the likelihood of continued rapidly increasing prices for oil and gas, along with a possible scarcity of supply.

However, examination of these three federal background papers reveals an important inadequacy in any development theory that relies on a shift in the commodity terms of trade. Comparison of *Challenge for Growth: An Agri-Food Strategy for Canada*, *A Forest Sector Strategy for Canada* and *Mineral Policy* reveals how each document follows a unique approach to economic development based on different views of underlying sectoral supply and demand, international trade prospects and possible constraints on production. The conclusion following from these very different papers is that a shift in the commodity terms of trade, even if valid, disguises differences in performance among the various resource commodities. For example, only food prices are expected to register real price increases. Forest product prices are very uncertain, depending on the quality of management of a depleting resource in Canada and on possible competition from new producers and substitutes. Finally, *Mineral Policy* concludes that while real prices of certain rarer minerals may rise, the relative abundance of other important minerals will hold down mineral prices in general.

The economic development paper of the federal government marks a return to a "staple theory of economic development" view of the world. Many of Canada's historians have viewed the history of Canada's economy through the prism of the staple theory. This theory argues that Canadian economic development has been based on the exploitation of a succession of commodities such as fur, fish, lumber and wheat, and that this has in turn determined the growth of transportation systems, the location of Canadian communities and the establishment of commercial and investment networks. The economic development policies of the current federal government can be interpreted as being based on a prescriptive version of this theory.

There are some disadvantages to an updated staple theory as an intellectual framework for economic development policies. The value of moving toward further dependence on natural resources would be doubtful. Since there are considerable short-term price fluctuations for commodities in general and among specific commodities, a greater reliance on natural resources could contribute to economic instability. Moreover, there is the question of the role of the manufacturing and service sectors in the Canadian economy. To permit greater production of natural resources, factors of production would have to be drawn away from other industries.

The increasing emphasis on the natural resource sector as the engine of growth is based not only on a view of the commodity terms of trade, but also on an expected appreciation of the international terms of trade. On the basis of the strength foreseen in the demand for Canada's natural resources, the federal government in *Economic Development for Canada in the 1980s* suggests that export prices will rise considerably faster than import prices. The result would be an improvement in the international terms of trade.

From the Council's perspective, what is especially important about this view of the international terms of trade is its implications for the role of the manufacturing sector. The Council's view of the prospects for manufacturing is more positive because there has been more strength in that sector than is generally appreciated. Council research indicates that although Canada's deficit in fully manufactured goods has grown rapidly in the past 20 years, it is smaller than it used to be – not larger – relative to total two-way trade in such products. Moreover, some recent work indicates that Canada may be closer than previously thought to minimum efficient plant scale in many industries. Import penetration – the proportion of domestic consumption accounted for by imports – did rise considerably between 1965 and 1980, from about 20 per cent to more than 30 per cent. However, export orientation – the proportion of Canadian shipments accounted for by exports – also grew from less than 20 per cent to about 30 per cent. On balance, the degree of manufacturing self-sufficiency did not change. Similar results appear if end products alone are considered. A detailed analysis of 130 categories and subcategories of manufactures reveals that 64 experienced no change in self-sufficiency over the 15-year period, while 40 showed a deterioration in relative position and 26 enjoyed an improvement. (But since no overall change occurred for manufacturing as a whole, it follows of course that the average loss among the decliners was substantially smaller than the average gain among the improvers.) On the basis of all these factors, Council researchers concluded there is little evidence that the manufacturing sector has withered, leaving only primary production to benefit from a more open international trading environment.[2]

Economic Development for Canada in the 1980s highlights the $440 billion of major investment projects identified in the *Report of the Major Projects Task Force*. The document stresses the potential spin-offs for the manufacturing sector from these capital projects. In addition, it identifies another major engine of growth – industry based on high technology and innovation.

As a result of recent economic performance, many questions have arisen about the extent to which the federal government's economic development policies rely too much on megaprojects and their industrial spin-offs for the manufacturing sector. Chapter 3 includes a discussion of the risks involved in relying on these major projects. In brief, there now seems to be considerable doubt about the wisdom of investment in many of the projects and about the eventual pace of their development. The Council has always considered it important to stress the investment requirements in sectors unrelated to major projects. As noted in Chapter 3, investment in major projects will constitute only about 20 per cent of the capital requirements of the country by the turn of the century. Still, Council research supports the federal government's emphasis on the potential natural spinoffs for the manufacturing sector from these projects. In general, research indicates that the best performers in the manufacturing sector tend to be those industries related to the primary sector, such as wood and paper products, metals, other mineral processing and some primary chemical industries. There are fewer good performers among secondary manufacturing activities.

The Council is also optimistic about the role and potential of industry based on high technology and innovation. Nevertheless, research shows that the strengths in the manufacturing sector are not limited to high technology and innovation, but are more broadly based. Indeed, Council research has tried to compare the performance of high technology industry and other manufacturers. Although there are difficulties of measurement, this research tends to indicate better performance and efficiency of scale in manufacturing industries other than those directly related to high technology and innovation.

The federal government's economic development policies also raise questions about regional development. *Economic Development in Canada for the 1980s* optimistically concludes: "Seldom in this century has it been possible to identify genuine prospects for growth in every region. But this is the prospect today." The basis for this conclusion seems to be that since each region has unique opportunities based on natural resources, the federal government will be able to find genuine prospects for all regions. In addition, the document emphasizes the federal government's "special responsibility for preserving and strengthening the integrity of the Canadian economic union," committing itself to the free flow of goods, services and capital. The government also indicates in the document that it does not always favour joint implementation with the provinces of economic and regional development programs. These principles reveal the shift in emphasis away from federal-provincial coordination of the administration of programs toward a greater federal presence and visibility in economic and regional development.

An important initiative that further clarifies this new federal approach to regional and economic development was the major reorganization of federal economic ministries on January 12, 1982. These organizational changes are, to a considerable extent, complementary to the government's economic development policies. The reorganization made the following adjustments to federal ministries and their responsibilities:

– A new central agency, the Ministry of State for Economic and Regional Development (MSERD), was created by the addition of regional policy and coordination functions to those of the Ministry of State for Economic Development. MSERD is responsible for ensuring that regional concerns are reflected in economic decision making by Cabinet.

– MSERD serves a new Cabinet Committee on Economic and Regional Development, which replaced the Cabinet Committee on Economic Development. The new Committee is responsible for the economic development and energy envelopes. The Committee also administers a Regional Fund, which consists of money previously allocated to expiring General Development Agreements with the provinces.

– MSERD is to operate in a decentralized way, with senior executives (Federal Economic Development Coordinators) whose offices in the provinces are to provide direct and convenient access to the federal government, to ensure coordination of federal departments, and to give Cabinet direct and immediate access to information on regional needs and opportunities. MSERD is also responsible for coordinating the activities of Project Directors of major projects. They are to be appointed by Cabinet to coordinate federal involvement in megaprojects, and to ensure rapid and effective federal responses to emerging difficulties or bottlenecks in specific megaprojects.

– A new Department of Regional Industrial Expansion (DRIE) was established through the amalgamation of the regional programs of the Department of Regional Economic Expansion (DREE) with the industry, small business and tourism components of the Department of Industry, Trade and Commerce (ITC). DRIE integrates DREE's regional and ITC's sectoral expertise. The amalgamation was designed to give greater priority to regional objectives in industrial policies, while providing business with better access to federal industrial and regional development programs. Responsibilities assigned include a strengthened Office of Industrial and Regional Benefits, the Industrial Opportunities Program Board, and a newly established Office of Industrial Adjustment (modeled on the Canadian

Industrial Renewal Board and covering a broad range of industries).

– The Department of External Affairs added to its existing mandate responsibilities for trade policy and export promotion previously under ITC. These responsibilities include the conduct of bilateral trade negotiations, administration of export and import controls, and tariff policy. (Tariff responsibilities are shared with the Department of Finance.) In addition, these changes brought to the Department's portfolio responsibility for the Export Development Corporation and the Canadian Commercial Corporation, both of which have an important role to play in state-to-state trading negotiations.

– The Federal-Provincial Relations Office (FPRO) has been assigned the responsibility of establishing its own regional offices, each headed by a senior official. This official is to chair a regional council of officials of all federal departments in the region, including the Regional Coordinators of MSERD, in order to facilitate coordination of federal programs in the region.

These organizational changes further clarify some of the elements of *Economic Development for Canada in the 1980s*. They underline the priority the federal government gives to implementation of its regional policies. The creation of senior regional coordinators and offices under the direction of MSERD and FPRO indicates the considerable resources the federal government is willing to allocate for these purposes. Similarly, the end of the General Development Agreements and the creation of a Regional Fund to be administered by the Cabinet Committee on Economic and Regional Development reflect the government's desire for greater presence and visibility in the administration of federal regional development programs.

The reorganization of DRIE and MSERD also shows the importance assigned by the federal government to the major projects for industrial development and to the exploitation of industrial spin-offs associated with them. The appointment of Project Directors under MSERD to coordinate activities relating to selected megaprojects constitutes a new type of federal involvement in such projects. Also, the strengthening of the Office of Industrial and Regional Benefits reflects the high priority given major projects. The reorganization of the Department of External Affairs, with new responsibilities for trade and export promotion, highlights the extent to which the federal government hopes to achieve export-led economic growth.

There are several other issues related to federal regional development policies. Considerable institutional changes have been made in order to achieve the partly political objectives of greater federal presence and visibility in regional economic development. In response to criticism of political motives, some have argued that these changes enhance the cooperative framework by providing clearer responsibilities for the levels of government, with the federal government entirely responsible for some programs and the provinces for others. However, the changes do seem to contain potential for confusion. Many federal departments have long-standing regional activities and representatives. These changes may effectively add to the existing cooperative framework another complex set of mechanisms for coordination. The end result could be more complexity, not less. Moreover, the changes involve the creation of several new senior posts to improve coordination in each region of the particular major projects. There is a potential for conflict among these officials as each seeks to seize and maintain the lead role for his or her department in cases of overlapping or ambiguous jurisdiction.

Many of the details of future regional programs under the new federal coordinators and offices remain unclear. While the federal government has committed itself to maintaining the same levels in its Regional Fund as had been transferred to the provinces under the General Development Agreements, there are many unanswered questions concerning the precise nature of future programs when the agreements expire. With increasing government emphasis on restraint, the future maintenance and improvement of public infrastructure is a particularly grey area.

The degree of optimism concerning prospects for all the regions may be an exaggeration in the federal economic development paper. It is certainly true that every province has some potential for growth relating to natural resources. Still, it is not likely that natural resources will provide "equal" opportunities for each province. *Economic Development for Canada in the 1980s* implicitly acknowledges this when it notes that half of all the major projects analyzed by the Major Projects Task Force were located in the three westernmost provinces[1].

Major Projects and the Allocation of Resources

Central to the issue of how much to rely on major projects in economic development policies is the broad question of the most efficient way to allocate resources in the economy. Decisions on investment in large projects must be made on the basis of a sound knowledge of costs and benefits to the economy as a whole. It is not sufficient to focus only on the returns to the major players involved, whether they be from the private or public sector.

Many of the megaprojects being considered as part of the federal government's economic development and energy policies are felt to be beyond the resources of large international companies or even consortia of such companies. As a result, several different kinds of public assistance are being considered or advocated to encourage these ventures – such as cash grants, tax incentives, direct equity investments, loan guarantees and other forms of concessionary financing, and direct price incentives (e.g., the international price for oil produced by oil sands plants).

When government intervention in the economy is proposed to attain specific objectives, a fundamental question must be asked: will the benefits from the proposed actions exceed their costs?

When government objectives other than that of increasing efficiency in the allocation of resources are involved (such as the National Energy Program goals of attaining self-sufficiency or a greater degree of Canadian ownership), it is important to ask what government assistance is required to achieve these objectives at the least economic cost. When use of a variety of instruments of government assistance is being contemplated, as in the case of megaprojects, it is also important to seek the instrument or combination of instruments most appropriate for the purpose.

These questions are necessary to assess any form of government intervention in the economy, but the magnitude of the investments being considered in some of these major projects makes the questions especially important. For example, individual tar sands plants that are still candidates for public assistance (despite the decision not to proceed with Alsands at this time) involve investment outlays greater than $13 billion – an amount equivalent to about 4 per cent of GNP in 1981. Inappropriate decisions concerning public assistance to projects of this magnitude could result in the misallocation of a substantial proportion of the nation's available investment resources and thereby significantly reduce the potential standard of living of Canadians.

A variety of techniques has been developed to assess the costs, benefits and effectiveness of public assistance to investment projects. The Council has previously emphasized the importance of their use.[3] Although most of these techniques are now fairly well known, more use could be made of them in government decision making. We also draw attention to some less widely known techniques that might improve the decision-making process.

Economic Benefits and Costs

Principal instruments of government intervention constitute transfers from some Canadians to others. Government assistance to energy investments, for instance, diverts labour and capital from other uses in the economy. However, this involves an economic cost. As mentioned above, a fundamental question is whether the economic benefits from such government actions exceed their economic costs. Where objectives of government other than increasing efficiency in the allocation of resources are concerned, it is equally fundamental to ask about the price required to attain these objectives. Cost/benefit analyses of these two types should thus be mandatory in assessing investment projects to be assisted under federal economic development and energy policies.

The significance of the cost/benefit criterion can easily be demonstrated. Some public investments, such as equity in Crown corporations engaged in commercial activities, do not attract adverse public attention if they merely generate a positive cash flow. In other cases, such as provincial Crown hydro corporations, public investments pay no corporate taxes and are required by legislation to earn a rate of return that only covers their financial costs. The rate of return on capital invested in these public utilities – including taxes and after inflation – was about 3.5 per cent in the 1960s and 1970s. These "requirements" for public investment are much lower than any estimates of the long-run social rate of return in the economy.

Cost/benefit analysts in the federal government have been advised for some years to use a "social discount rate" of 10 per cent per annum to reflect the average rate of return on capital in the economy (before taxes and after inflation). There has been some controversy about this specific value, and it has recently been suggested that a "real" social discount rate of 7 per cent per annum might be more appropriate. As noted above, however, this range of real social discount rates of 7-10 per cent per annum before tax is well in excess of that normally accepted for some public investments.[4]

The apparently acceptable rates of return on public investments are even lower in relation to the minimum rate of return on capital required by large pools of private capital before investments will be undertaken. The guaranteed 20 per cent or more after-tax rate of return sought by private firms in the Alsands consortium as a condition for participation in that project is a case in point.[5]

The appropriateness of the suggested cost/benefit analyses of megaprojects appears to be enhanced on further examination of the economic nature of these projects. Many of the energy-related projects constituting the largest proportion of this portfolio are highly capital intensive. It has been proposed, in effect, that substantial outlays of capital be invested in the near future in order to produce energy in the more distant future (e.g. the various oil sands plants and proposals to harness tidal power in the Bay of Fundy). The presumption is that the investments will be worthwhile – in economic or other terms – as an alternative to acquiring energy on the international market. As the 20 per cent after-tax rate of return required by private sector participants in the Alsands consortium indicates, however, the proposed substitution of capital now for energy later has substantial costs. The sensitivity of these investments to movements in the international price of energy is also considerable.

Budgetary Costs

In addition to increased emphasis on the use of cost/benefit analysis, improvements could be made in the fiscal and accounting frameworks of governments. This would serve to enhance public knowledge about any government assistance being contemplated, thereby providing a check on policy makers that would prompt closer attention to the costs and benefits of development projects.

The accounts of the Canadian provincial and federal governments (like those of most other governments) are recorded on a cash basis. In this accounting system, the current and future year budgetary implications of a host of fiscal instruments that can be used to achieve the same purpose are often not revealed. Thus we have noted that public assistance to private sector participation in megaprojects is being contemplated in the form of cash grants, tax relief, guaranteed loans to the private sector and other measures.

The essential problem with these forms of assistance, in a cash accounting framework, is that some are less visible than others, and in some the cash costs appear only after delay. To minimize the likelihood of public criticism, policy makers may tend to favour the use of the less visible instruments and those whose costs become evident only later.

Some Canadian governments have taken major steps in recent years to augment information on the budgetary costs of alternative policy instruments and to introduce control mechanisms over instruments that may be used as substitutes for direct government spending. For instance, the governments of Canada, British Columbia and Quebec have all published "tax-expenditure" accounts in recent years. In addition, the federal government's new Policy and Expenditure Management System (PEMS) is intended "to face the (Cabinet) committees with the fiscal consequences of their decisions" and "to avoid biasing a committee's decisions on the choice of the proper policy instrument."

Additional steps could be taken to improve information on the budgetary costs of policy instruments and to control use of these instruments. For instance, no Canadian government at present attempts to provide information on the likely future budgetary costs of large guaranteed loans; nor is any provision made in the federal government's PEMS for the budgetary costs of such loans. This policy instrument has been used recently in several well-known cases (e.g. Massey-Ferguson, Chrysler, Maislin) to prevent the collapse of industrial activities and to protect jobs.

Although loan guarantees are treated in the accounts of governments as being without cost, they are not actually costless. They have a value to the recipient and involve contingent liabilities for the governments providing them. Losses from some of these guaranteed loans (e.g. Consolidated Computer Limited) become evident only years after the loan guarantee was made.

For some years now, techniques have been used to place a cash value on these contingent liabilities in financial markets. Similar valuation procedures should be used to assign them a cash value in the budgetary process of governments. Allocations of funds through the federal government's PEMS could also reflect the cash values of these guarantees.

Cost-Effectiveness of Government Assistance

Several questions arise concerning the effectiveness of alternative policy instruments in attaining government objectives. For instance, might tax incentives have their effectiveness diluted because they benefit those outside Canada? This is a problem the Council raised recently in its consideration of intergovernmental taxation arrangements in *Financing Confederation*. It arises when large international firms are involved, and the effects of Canadian tax incentives on the global tax position of the firms must be considered. It is possible, for example, that tax incentives accorded by Canadian governments may simply result in transfers to the treasuries of foreign governments through parent companies. The federal government recognized the importance of this possibility in the energy sector when superdepletion, depletion, and other tax preferences conferred large benefits on multinational corporations. It is much less likely to be a problem since the introduction of the National Energy Program. Depreciation was replaced by cash grants geared to the degree of Canadian ownership.

Another problem that must be considered is the effect of various types of government assistance on the incentive structure facing the management of assisted private sector enterprises. Some forms of contingent liabilities undertaken by governments, for instance, may establish a greater incentive for premature project abandonment than others.

Energy Policy

Through the National Energy Program and associated policies, the federal government has taken a highly interventionist and regulatory approach to the energy sector. This approach ensures that it plays a leading role in the economic management of the oil and gas industry. For reasons of national security and because of difficulties perceived in the sharing of energy revenues among governments, the federal government selected the energy sector as a special case requiring an extraordinary degree of government activity. But the rationale behind the federal government's policies also relates to the potential of economic development associated with the petroleum industry. The federal government has identified the energy sector as one likely to have a profound impact on the Canadian economy through its potential for job creation, domestic inputs of goods and services, and redistribution of income and expenditure throughout the economy.

The regulatory option chosen by the federal government is not without precedent, given the long history of federal regulation of the energy sector in Canada. Since the passage of the Electricity and Fluids Exportation Act of 1907, the federal government has reviewed and licensed exports of energy resources. Following the discovery of the Leduc oil fields in Alberta, the 1949 Pipeline Act provided for federal regulation of interprovincial oil and gas pipelines. And the National Oil Policy of 1961 established federal controls on domestic oil prices, creating the Borden Line. It required that markets west of the Ottawa Valley be supplied by products derived from indigenous crude, and established the pricing of western petroleum at levels equivalent to those in the United States.

However, the seeds of current federal energy policy are found in the events of 1973-74. Following the explosion of world oil prices and the formation of OPEC, the international petroleum market became increasingly dependent on politics and state-to-state relations. In the face of these events, the federal government responded to challenges created by issues of national security and supply, as well as by the shock of higher prices to the economic system. The result was that the market-determined price for oil and gas was replaced by a regime of federally administered prices, supported by oil import subsidies, and that the traditional authority of the provinces over the management of natural resources was challenged. The federal government established policies for the exploration, development and marketing of oil and gas, which entailed special price controls, taxes and subsidies, as well as the active presence of Crown corporations and federal departments.

The story of the energy sector in the 1973-79 period is well documented. In Canada, prices remained well below world levels and long-term replacement costs. Consumption increased; production declined. Federal oil subsidies rose with the higher level of imports. There was greater pressure on the federal government's fiscal capacity, while both oil producers and oil producing provinces realized large revenues. Conflict between the federal government and the producing provinces flared.

With the second massive hike in world prices in 1979-80, most of these trends were magnified several times over. The erosion of the federal government's fiscal capacity became more pronounced. In 1980, the cost of the Oil Import Compensation Program climbed to about $3 billion, or roughly 28 per cent of that year's federal deficit (on a National Accounts basis). At the same time, the producing provinces' rapidly rising energy revenues created important problems for the federal government's equalization system, calling into question its appropriateness. Finally, in the wings, the oil and gas industry was realizing record profits.

In this environment, the federal government unveiled its National Energy Program with the October 28, 1980 budget. In essence, it was a calculated attempt to gain control over an extended area of decision making related to resource development and economic development in general.

The several goals of the National Energy Program established the breadth of the federal government's proposed activity in the energy sector. The basic objectives of the program are threefold: "energy security," which means, in practical terms, independence from the world oil market; "opportunity," which involves a commitment to achieve greater Canadian ownership and control of the oil and gas industry; and "fairness," which concerns the way the benefits and burdens of energy pricing and development are distributed among producers, consumers, the different levels of government and the regions of the country.

To achieve these goals, generally increased price levels were proposed under the NEP for higher cost oil production (enhanced oil recovery and synthetic crude) as an incentive to expand production. As well, oil and natural gas prices were scheduled to rise at a different pace so as to increase the price differential in favour of gas, thus providing an incentive to off-oil conversion. Higher domestic prices for oil were intended to shift the cost of the Oil Import Compensation Program from general taxpayers to energy consumers. The reduction in the gap between world and domestic prices would reduce the net cost of this program. Consumers were expected to react to rapidly rising oil prices by some combination of conservation and substitution of alternative sources of energy.

New taxes, including the Petroleum and Gas Revenue Tax and the new Natural Gas and Gas Liquids Tax, the Canadian Ownership Charge and special charges on oil and gas consumption were designed to finance expenditures on energy, to encourage ownership and control of the industry by Canadians, and to help reduce the government deficit. Petro-Canada, through direct expansion of its operations and purchase of foreign-controlled companies, and other new federal Crown corporations would also be employed to expand domestic presence in the industry. Legislation was provided to reserve to the Crown (in the name of Canada) a 25 per cent interest in Canada Lands oil and natural gas production, as well as to ensure a minimum 50 per cent Canadian ownership before production. Several measures were also proposed in the NEP to encourage off-oil conversion, increased efficiency of oil use, energy conservation, regional development, and greater diversification of available energy alternatives, particularly in regions east of Montreal. In general, tax incentives and grants designed to encourage exploration put greater emphasis on development of Canada Lands rather than on the remaining, more conventional fields.

These measures extending federal authority over resource development and revenues were contentious. By the end of October, Alberta announced a cutback of 180,000 barrels per day in oil production. This was followed in November by a legal challenge to the proposed federal excise tax on natural gas. However, intensive negotiations between the federal government and the producing provinces finally bore fruit. Agreements were signed between the federal government and the provinces of Alberta, British Columbia and Saskatchewan in September and November of 1981. While these left unchanged the central thrust of the NEP, the specific price and tax proposals were altered considerably. Moreover, administration of incentive grants to be paid in Alberta was shifted to the province. With these and subsequent federal-provincial agreements, national energy policy and its application began to take on a typically Canadian character, with both levels of government having some measure of control except in the Territories and adjacent offshore areas where the federal government has exclusive jurisdiction.

Under these federal-provincial agreements, "old oil" prices were increased in accordance with a schedule designed to bring domestic prices up to 75 per cent of the international price. A new federal Incremental Oil Revenue Tax of 50 per cent was substituted for the corporation income tax on revenue resulting from the increase in prices over the NEP. In October 1981, Alberta changed its Royalty Tax Credit Program to increase the revenue flowing back to producers on old oil, thus easing their cash flow problems. Prices for "new oil" – that is, oil from conventional pools discovered after January 1, 1981 – enhanced oil recovery, and new oil sands projects were to be based on a New Oil Reference Price schedule, with higher levels and escalation rates than for old oil. As of January 1, 1982, the old oil field price was established at $23.50 per barrel, while new oil was set at $47.30 at Montreal or about $45.92 at the wellhead. New oil prices were to increase by $3-4 every six months, but not to exceed 100 per cent of the world price, or $79.10, at July 1, 1986. The agreements also eliminated the federal-provincial jurisdictional issue relating to the Natural Gas and Gas Liquids Tax; the tax rate was set at zero on exports, leaving the issue moot.

At mid-1982 the Canadian energy sector was in a state of flux. This reflects in large part the changing prospects of the economy and of the energy sector itself. With international oil prices no longer rising and general economic performance poorer than expected, there has been a widespread slowdown in the industry, not only with respect to major projects like the tar sands, but throughout the sector's production and exploration activities. Profits in the industry have tumbled from their 1979 levels. In part, however, the state of flux reflects the particular domestic environment. The NEP goal of Canadian ownership and control proceeded with dispatch. As will be discussed in Chapter 5, the financial dimensions of this development are still reverberating throughout the economy. More particularly, some privately owned Canadian firms in the energy sector are in especially difficult positions after involvement in Canadianization.

As a result, domestic energy policies are changing. In mid-April, the Alberta government announced changes in the province's oil and gas royalty structure in response to the performance of the economy and the energy sector. Reacting to these same problems, the federal government released its *National Energy Program: Update 1982* in May 1982. Adjustments were made to the range of oil and gas production eligible for higher output prices and to related escalation rates; the rate of the Petroleum and Gas Revenue Tax was reduced for one year; the Incremental Oil Revenue Tax rate was set at zero for one year; and other adjustments made were designed to improve the industry's cash flow, to strengthen the position of small producers, and to encourage the development of higher cost sources of oil. Moreover, a Canada/Nova Scotia Offshore Oil and Gas Agreement was announced in March, although a dispute continues between the Newfoundland and federal governments over the control and management of offshore mineral rights.

Despite the uncertainty over the performance of the energy sector and over energy policies, the NEP *Update* leaves little doubt about the future role of the federal government. As a set of policies, the NEP has no shortage of federally administered prices, tax incentives and subsidies designed to direct exploration and production. Moreover, policy instruments of the NEP encourage the activity of certain participants as opposed to others. There is the Canadian Ownership Charge, as well as a comprehensive data bank identifying domestic firms able to provide services to energy projects. In addition, the federal government has used the NEP to strengthen its window on the energy industry, Petro-Canada. In the energy sector, the federal government not only umpires the game, it fields a team as well.

The Framework of Economic Development

Taken together as economic development initiatives, the National Energy Program and *Economic Development for Canada in the 1980s* mark major departures in Canadian economic development policies. On the one hand, through new taxation and pricing regimes, the federal government has transformed the energy sector into a regulated industry involving a strong federal presence both in setting the rules and in sharing the income from production and exploration activities. On the other hand, federal economic development policies have put greater emphasis on the natural resource sector. This has already resulted in institutional changes at the federal level designed to give it greater presence and visibility in the promotion of economic development and associated natural resource activities.

Uncertainty about the rules of the game has been enhanced by the implementation of these two programs. The uncertainty and instability have emerged in a broad range of criticism of these policies, ranging from small business and multinational corporations to representatives of foreign countries, notably the United States.

Perhaps the most important task of economic development policies is to promote a business environment, or a "microeconomic environment," that is favourable to production, investment and entrepreneurship. An integral aspect of such activities is some stability in the rules, particularly with respect to government regulation and taxes. When governments change the rules they are inevitably marked as "interventionist," or "hands on," which can deter production and investment activity.

It is important to stress that since the announcement of the National Energy Program and publication of *Economic Development for Canada in the 1980s*, the federal government has sought to maintain continuity by reaffirming the general framework of economic development established through the two programs, and by identifying those sectors and areas where it would play a "hands on" role. *Economic Development for Canada in the 1980s* can be interpreted as a document designed to establish the rules following the announcement of the National Energy Program. The federal government has stressed that the document identifies the major engines of growth where it believes there is a federal role to play – energy, agriculture, fisheries, mining and forestry. The government also underlines the document's assertion that the energy sector is a special case, and that the type of "interventionism" displayed in that sector is not appropriate for the other sectors. A more traditional approach, relying more heavily on the market, is evidently to be taken in other sectors. The NEP *Update* is significant in this regard too, precisely because it left the basic structure of the NEP intact, and because the tools created by the program were for the first time adjusted to reflect the current situation facing the industry.

It is easy to lose perspective on issues in this debate. Changes in the rules tend to incur sharper responses than might otherwise be the case; the extent to which governments can be labeled as interventionist may be exaggerated. For this reason, the National Energy Program deserves some specific comment to put it in a broader and longer-term perspective. While the NEP certainly merits some criticism, it also includes some desirable and enduring accomplishments which fair-minded individuals should not overlook. Indeed, in many ways the motivation behind the NEP is a most laudable one: the federal government sought to take advantage of perceived opportunities in the oil and gas sector to achieve longer-term goals for the energy sector and for the economy in general.

In reviewing the National Energy Program, there are several aspects worth noting. There are advantages to the way the NEP establishes a general framework for energy development, setting several goals and thus not putting all eggs in one basket. It creates a policy framework within which energy alternatives involve trade-offs among the various energy issues. This has the advantage of leaving many energy alternatives open, while establishing the parameters within which these alternatives may change. Such an approach seems justified for the energy sector, since no one can be sure today which energy sources will be more economical in the long term, and which technology will be most successful.

The NEP also serves the goal of reintegrating the Canadian energy sector with international markets by establishing a pricing schedule leading to an increase in oil prices toward international levels. As the Council stressed in earlier Reviews, this is essential to achieving the improvement of the longer-run conditions of supply as well as the necessary incentives to conserve oil use in Canada. However, the Council would have preferred faster integration of Canadian and world oil prices, as well as a much less complex oil pricing system.

In terms of supply and demand, the NEP deserves credit for its emphasis on expanding the use of natural gas and for setting measures in train to achieve conservation, especially through off-oil conversion. With natural gas in abundance, and with oil a relatively scarce yet essential source of energy, the NEP took a step in the right direction by establishing a pricing schedule designed to encourage the use of natural gas and by promoting the expansion of the gas pipeline network throughout the country. Moreover, there was a general package of measures in the NEP aimed at pushing conservation, including the Canadian Home Insulation Program, the Canadian Oil Substitution Program, and new research and development programs.

These measures do raise many important questions. Since the different energy resources are unevenly distributed throughout the country, costs are incurred in establishing a nationwide pipeline system and greater use of gas. The expansion of the use of natural gas will not necessarily lead to the provision of energy services at the lowest cost to Canadian society in the long term. Of particular concern is the extent to which these initiatives are consistent with the pricing and transmission network of electricity. Coordination is not easily achieved here, because while natural gas is subject primarily to federal policies, electricity is mainly a provincial concern. There are also important challenges related to conservation policies. No one is really certain of the consequences and payoffs of policies aimed at demand reduction. While the NEP *Update* notes that "progress has substantially exceeded expectations," the extent to which demand reduction relates to economic performance in general remains to be seen.

The NEP helped resolve issues related to the division of energy revenues among governments in Canada. While the Council found the delays created by conflict between federal and provincial governments on energy issues unfortunate for Canadian energy policy, the NEP has led to agreements with the producing provinces of Alberta, Saskatchewan and British Columbia covering a five-year period. This should make energy policy less confrontational at least during that time. Moreover, the Council was concerned in earlier Reviews and in its report *Financing Confederation* about the strains put on the federal equalization system by resource revenues. While there remain fundamental issues to be settled concerning federal-provincial fiscal arrangements, the resolution of the sharing of resource revenues among governments under the National Energy Program is a considerable accomplishment. It provides an interim period during which the Council hopes solutions to some of these fundamental issues can be found.

Judgments differ a good deal about other aspects of the National Energy Program. Some applaud and others criticize oil self-sufficiency as a goal for the medium term. In general, the rationale for oil self-sufficiency cannot be supported by reasons of economic efficiency alone. Other political and social considerations lead to emphasis on the importance of this goal. Some applaud and others criticize the goal of greater Canadian ownership and control of the oil and gas industry. (Some of the issues relating to this debate are discussed in Chapter 5.) While many Canadians appear to support the goal of Canadianization, many also wonder whether the costs are worth the benefits. Finally, there is considerable debate about the sharing of revenues between governments and the industry. Some suggest that the squabbles between governments have led to a royalty and taxation system that is not sufficiently robust to provide for the cash flow requirements of the industry. With economic performance poor and international energy prices low, revisions to taxes and royalties were made by the federal government in its NEP *Update* and by producing provinces. However, many have argued that these changes are insufficient for the industry's needs.

Perhaps the most contentious aspect of the NEP is the extent to which the federal government has chosen a highly regulatory, "hands on" approach. In the NEP, there is not only a complex set of administered prices for oil and gas, but also a direct grant system favouring exploration on Canada Lands and Canadianization of firms. Both these pricing and grant systems involve more than mere consideration of the general framework of energy development in Canada. They require the federal government to move beyond framework policies to the realm of planning inputs and outputs of particular firms.

The constraints that made this regulatory route an option are to a certain degree understandable. The requirements of national security and supply put special responsibilities on the federal government. Canada's system of federal-provincial transfers has suffered from special problems created by energy revenues. Moreover, the nature of Canada's federal state imposes certain powers. These requirements do not always fit with the most efficient and less regulatory options of economic policy making.

Despite these constraints, the regulatory character of the NEP is a legitimate source of concern. The complicated pricing and grant systems of the program have required the creation of a large bureaucracy to administer them. It will be necessary to evaluate whether the tasks the federal government performs under the NEP could be conducted more efficiently and at lower cost by some other, perhaps simpler, means.

To address this question, as well as some of the other energy issues raised, the Council recently created an energy group. It is to prepare a report for 1984. Its approach will not be limited to discussion of the NEP. In searching for truly national energy policies, the objectives and choices are much more diverse. These involve a wide range of interests, including those of federal and provincial governments and a diverse number of private interests.

In the broad debate about federal energy and economic development policies, the Foreign Investment Review Agency and its Act have also played a central role. FIRA has borne the brunt of much private sector and international criticism as the symbol of the federal government's interventionist stance. In response to these criticisms, as with the other economic development policies, the federal government seems to have sought to maintain "continuity" in the face of criticism. In *Economic Development for Canada in the 1980s*, the government stated that previously proposed changes to the Foreign Investment Review Agency and its Act, generally regarded to be further steps toward intervention, were to be delayed indefinitely. In its June 1982 budget, in response to criticism of the Agency, it also made some of the administrative requirements of FIRA less burdensome by enabling more firms to file under "small business procedures." These procedures are generally not subject to full review. Even though the federal government made these changes, the structure of FIRA remains largely as before, and thus subject to considerable criticism.

As part of the Council's Regulation Reference, a research study on the FIRA process of regulating foreign investment was completed.[6] On the basis of this study, there does seem room for improvement in the regulatory processes associated with FIRA. The study examines the role of Cabinet in making final rulings on applications. Although the original intention was to establish the principle of political control over the FIRA process by using Cabinet as a regulatory authority, the study argues that Cabinet did not follow up a ministerial promise to flesh out a meaningful foreign investment policy based on the concept of "significant benefit" to Canada. This was so, according to the report, because Cabinet had become bogged down by the large number of cases it had to handle. In addition, the study stresses how Cabinet, as a regulating body, failed to meet the requirements of political accountability. It notes that the Foreign Investment Review Act does not require Cabinet ministers to answer to Parliament for the rulings made on FIRA applications. In fact, it argues that the Act bolsters the principle of Cabinet confidentiality by giving the responsible Minister the right to decide whether to release details of a particular case. Since applicants usually prefer that undertakings not be made public, the study notes that the Minister almost always maintains confidentiality. As a result, the study concludes, there is no way to learn how – and how well – the Act is being implemented.

Looking to the medium term, with the debate about federal economic development and energy policies as background, the issue of stability and continuity of rules of economic development appears crucial. Without this stability, it would seem unlikely that economic renewal of the resource, manufacturing and service sectors will be possible given the immediate economic prospects. Moreover, this stability is necessary to meet the challenges of "positive adjustment," which require governments to pursue conscious policies enhancing the flexibility and resilience of domestic markets in the face of change. Markets can best adjust positively to continuous changes in demand, in the supply of inputs and in production technology if agents in the market can plan and operate in a context of stable and predictable political, economic and social conditions.

In Chapter 3, many of the major challenges for positive adjustment in this decade were described. By 1987, major reductions in international tariffs will be implemented fully in Canada as agreed by the GATT nations in the Tokyo Round. However, there are increasing trends toward trade protection through nontariff barriers, as well as special contractual and preferential arrangements among countries.

In the face of such economic and social evolution, a central question arises concerning the role of government policies to aid declining industries. Positive adjustment is based on the assumption that a competitive market economy is normally the best mechanism to marshal responses to social, economic and technological change that are flexible, constructive and without excessive cost. This approach would tend to encourage governments not to interfere in the decline of industries resulting from market forces. When industries are in decline and without resources to restructure themselves, however, there are some valid arguments for temporary government assistance. The social costs of ignoring the decline of many domestic industries are simply too great.

In Canada, traditional manufacturing sectors such as leather goods, textiles and machinery have faced stiff competition for some time from firms in other industrial countries and in newly industrializing countries. The response from Canadian governments has been a high degree of trade protection, numerous measures providing temporary support, and policies generally inconsistent with achieving positive adjustment over the long term. Recent federal economic development policies indicate that the government is disposed to a more positive approach to these industries – an approach designed to give greater scope to market forces and, only where necessary, to aid industries' adaptation to new technologies so as to become more competitive internationally. With this kind of rationale as the basis for their terms of reference, the federal government recently created the Office of Industrial Adjustment and the Canadian Industrial Renewal Board. The government also reduced special protection for the footwear industry but, with current economic circumstances and pressure from the industry, it then reversed its decision and again reinstated the quota protection. The government also imposed a "voluntary" quota on automobile imports from Japan.

There is little doubt that the debate on Canada's economic development policies, and the role of the energy sector in development, remain clouded by a number of unanswered questions. In many ways, this is not surprising. Not only are the specific inputs and outputs of industries and sectors difficult to predict with accuracy, but also the more general economic, social and political environment is subject to quite unpredictable changes. Largely because of the uncertainty surrounding these factors, economic development policies have shifted over the past three decades. In the annals of Canadian economic development policies, the National Energy Program and *Economic Development for Canada in the 1980s* are events of significance. Yet they will be naturally subsumed by changes in economic conditions and in the broader sociopolitical environment. The economic development debate will continue. Governments must persevere in their search for the best framework for economic development, and for the appropriate balance between the roles of markets and political-administrative intervention.

5 Macroeconomic Policy Issues and Options

The outlook for the Canadian economy is troubling. Inflation will continue to be a problem and will abate only gradually over the next few years. The recovery will get under way, but it will not be strong enough to lower unemployment by much. A very difficult period of both high inflation and unemployment appears to be unavoidable.

During this period there will be calls for radical policy initiatives: massive fiscal stimulus to relieve unemployment; dramatic drops in interest rates to spur real growth; exchange controls to protect our dollar; and wage and price controls to prevent a runaway inflation. These calls for a quick fix will sound attractive to many – especially if the situation turns out worse than expected and the recession deepens.

The government has the difficult task of guiding the economy through these troubled times. Policy must be directed toward facilitating the recovery, but at the same time it must ensure continued progress against inflation. This is the criterion against which current policy is reviewed in this chapter. Some policy options are also raised.

Monetary Policy

Monetary policy is set on a staunchly anti-inflationary course. For almost six years the Bank of Canada has been successfully pursuing a policy of gradually reducing the growth rate of the money supply. The current target range for money supply growth is 4 to 8 per cent. The narrowly defined money supply, M1, has recently been running below the bottom of the range.

The consistency with which the Bank has met its targets has served to establish the credibility of monetary policy as an anti-inflationary tool. This credibility is important because it serves to dampen inflationary expectations directly, thereby helping to reduce the slack required to gear inflation down. It also guards against a takeoff in inflation if the economy has the misfortune to be subjected to an inflationary shock. The public knows the Bank has proven by past actions that it will not accommodate a breakaway inflation. The credibility of the monetary authority is a valuable asset for any economy. It would be shortsighted to consider any changes in monetary policy that would compromise this credibility.

There are, however, a number of important issues relating to the conduct of monetary policy that must be addressed. Some arise in the short term, others only in the medium term.

Costs of a Restrictive Monetary Policy

In Chapter 3 we discussed the costs of inflation. But monetary restraint as an anti-inflationary policy has costs of its own. In that chapter we cited estimates that, all other things being equal, it would require at least a 1 percentage point increase in the unemployment rate alone to slow inflation by 0.4 per cent. This cost would be mitigated to the extent that the monetary authorities were able to exert a direct influence on inflationary expectations.

In addition to the output and employment lost in the short run through monetary restraint, there are distributional and allocational costs to be considered. Monetary restraint has a narrower and more uneven impact on the economy than generalized fiscal restraint. This makes it a very blunt instrument of stabilization policy. Monetary policy has its main impact on the real output of the economy through the cost and availability of credit. Monetary restraint and high interest rates curtail interest-sensitive expenditures such as car and appliance sales, house construction, and investment in plant, equipment and inventories. In the business sector, firms that do not have taxable income see their after-tax costs of funds going up more than those that do. Many bankruptcies among large as well as small businesses can be attributed to high interest rates.

Among individuals, young people just starting their families and buying durable goods and homes are particularly hurt by tight money. Homeowners refinancing their mortgages are forced to cut back on other spending. The burden of combating inflation through monetary policy falls disproportionately on certain industries, firms, groups and individuals. This tempers the extent to which a deflationary monetary policy can be pursued, but it is no excuse for accommodating inflation. The costs of pursuing such a strategy would probably be even higher. In addition, external constraints on Canadian monetary policy must be considered.

External Constraints on Monetary Policy

These constraints tend to be a recurrent issue. The Bank of Canada cannot completely ignore the external value of the Canadian dollar. In an economy as open as Canada's, the links between external and domestic prices are pervasive. All pass through the intermediary of the exchange rate.

Views differ about the likely impact of a decline in the exchange value of the Canadian dollar on domestic prices. The lower limit would be determined by the roughly 20 per cent import content of the basket of goods and services included in the consumer price index. If the Canadian dollar were to depreciate by 10 per cent, the consumer price index would be increased directly by about 2 per cent. The degree of passthrough could be even higher and approach proportionality if most Canadian goods are priced to meet import competition and if wages increase in response to higher prices. In the extreme, a wage/price spiral could be triggered by a depreciation and the increase could be even more than proportionate. This would set the stage for a further round of depreciation.

In our view, the likely degree of passthrough lies between the lower limit set by the import content of prices and an upper limit of proportionality. The actual outcome in this range depends on economic conditions. The more slack there is in the economy, particularly in export producing and import competing sectors and in labour markets, the more likely that the inflationary impact would lie near the bottom of the range. If there is excess capacity in export producing and import competing sectors, producers are more likely to respond to a depreciation with expanded production and less likely to just mark up their prices. In addition, high unemployment will prevent workers from seeking to compensate for a depreciation by demanding higher wages. Thus slack in the economy serves, to a certain extent, to relax external constraints on monetary policy. But as long as lowering inflation is a key policy objective, monetary policy must continue to take external constraints into account.

Large pools of highly liquid funds, extremely sensitive to international interest rate differentials, exist. Their movements, once set in train by interest rates or other factors, can destabilize the exchange rate. The main tool that monetary policy has to offset these capital movements, and hence to cushion their impact on the exchange rate, is interest rates. It is often forgotten that increases in interest rates also raise costs and prices. The immediate impact may indeed be very significant, as has been indicated in a recent study.[1] On the whole, however, high interest rates, which reduce domestic demand and help to sustain the value of the currency, will be more deflationary than inflationary. This is particularly so where the alternative to an upward adjustment of interest rates is an extended period of weakness and instability in the exchange rate.

The vulnerability of the Canadian economy to capital flows and fluctuations in foreign interest rates has been underlined by recent events. As described in Chapter 1 of this Review, U.S. interest rates have become much more volatile since the U.S. Federal Reserve Board shifted from interest rate control of monetary growth to more direct control of the monetary base. To some extent this may reflect teething pains for the new procedures, but greater volatility would seem to be inherent in any procedure that seeks to exercise closer control over money growth.

The enhanced volatility of U.S. interest rates poses serious problems for the conduct of Canadian monetary policy. Under the circumstances, the Bank of Canada has little choice but to let Canadian short-term interest rates follow those in the United States, or else the exchange rate will move. It is really a choice of how much of the shock to take in interest rates and how much in the exchange rate. This may not seem like much of a choice, but it is not of the Hobson variety. Its consequences for the economy in terms of the short-term trade-off between inflation and unemployment are very important.

In deciding on the split of any shock between interest rates and the exchange rate, the latter should be viewed not only as the price of a U.S. dollar in Canadian currency, but also as the price of foreign exchange in general. This is what determines the inflationary impact of exchange rate movements. About a third of Canadian trade is with countries other than the United States, and the prices paid for these goods are obviously affected by the exchange rates between the Canadian dollar and the currencies of these countries.

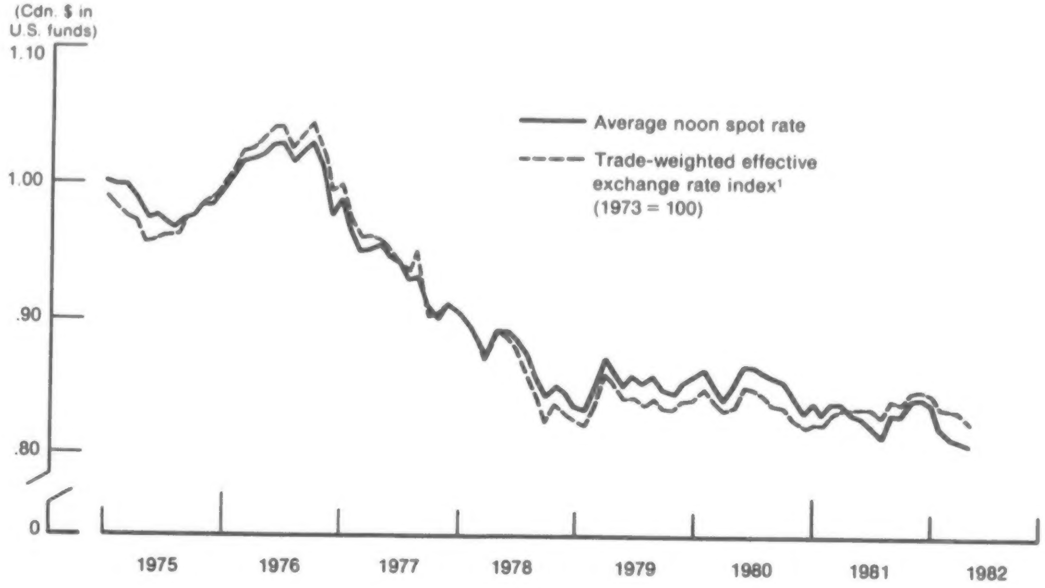
If the Canadian dollar depreciates relative to the U.S. dollar because U.S. interest rates rise, it does not necessarily follow that the Canadian dollar must decline relative to other currencies by the same extent – if at all. In fact, other countries have been less closely tied to U.S. monetary policy and have allowed their currencies to decrease more than the Canadian dollar in response to hikes in U.S. interest rates. While the Canadian dollar has tended to depreciate against the U.S. dollar, it has appreciated along with the U.S. dollar relative to other currencies. Thus, on a trade weighted basis, the Canadian dollar displayed a much greater degree of stability through 1981 than it did in relation to the U.S. dollar (Chart 5-1). For the year as a whole, the Canadian dollar depreciated marginally relative to the U.S. dollar, but appreciated slightly on a trade weighted basis. This would suggest that the inflationary consequences of the summer 1981 period of exchange rate weakness were less than might have been expected. If Canadian monetary policy were to focus more on the trade weighted exchange rate, it might allow more scope to depart from U.S. policy.

A potential problem for Canadian monetary policy would be the emergence of a clash between monetary and fiscal policy in the United States that could send interest rates soaring. The Federal Reserve Board has announced a 2.5 to 5.5 per cent target range for M1 growth in 1982 – very tight by almost anyone's reckoning. The U.S. Administration, for its part, has enacted a program of large tax cuts, increases in defence spending, and only partially offsetting reductions in nondefence expenditures. Many expected this program to result in large and growing deficits. The Congressional Budget Office, for instance, projected a federal government deficit of $109 billion in fiscal 1982, growing to almost $250 billion in fiscal 1987.[2] The Administration was more sanguine, forecasting a deficit of $100.5 billion in fiscal 1982, declining to $62.7 billion by 1987.[3] More recently, tax increases amounting to $98 billion over three years have been enacted. This has diminished though not eliminated concern about the size of the federal deficit.

If interest rates were to rise sharply in the United States, neither Canada nor the rest of the industrialized world would escape unscathed. But because of geography and the close trade and financial links, Canada would be hurt the most. The impact would be

Chart 5-1

Monthly Exchange Rate, Canada, 1975-82



1 This index is published by Morgan Guaranty Trust Company of New York in *World Financial Markets*. It measures changes relative to the currencies of 15 major countries. Weights are based on 1976 bilateral trade in manufactures.

SOURCE Data from Department of Finance Canada, and from the *Bank of Canada Review*, various issues.

twofold. First, the induced slowdown in U.S. economic activity would curtail Canadian exports to the United States. Second, sharply rising U.S. interest rates would necessitate a defensive tightening of Canadian monetary policy to protect the Canadian dollar. The double blow of sagging exports and high interest rates would most likely stop the incipient Canadian upturn in its tracks.

Another source of downward pressure on the Canadian dollar is expectations of higher inflation in Canada than in the United States. This is particularly evident in the different wage trends in the two countries.

The Canadian dollar is exposed not only to short-term capital outflows resulting from a run-up in U.S. interest rates, but also to capital outflows stemming from other sources. This was brought home by the large net direct investment outflows that occurred in the summer of 1981. In spite of strong support for the dollar, which included clamping down on monetary policy sufficiently to widen the differential between Canadian and U.S. short-term interest rates to an unusually large 400 basis points, it weakened from around 83 cents U.S. to below 80.5 cents in July and August 1981 before beginning to recover lost ground.

The need to defend the dollar by raising Canadian interest rates relative to those in the United States was all the more damaging because U.S. interest rates and the need to maintain a wide gap to stabilize the exchange rate resulted in a Canadian prime rate that reached 22.75 per cent. It was this bout of high interest rates that produced the recession from which the economy is just beginning to recover.

Capital outflows to acquire foreign-owned companies in 1981 were surprisingly large. Net outflows of direct investment for the year totaled $10.2 billion, up from $2.2 billion in 1980. About $7.5 billion went to pay for these takeovers. Much of this activity was related to the government's program to increase domestic ownership of the oil and gas industry to 50 per cent by 1990. The takeover of Petrofina by Petro-Canada was the first to be financed by the Canadian Ownership Charge on petroleum purchases by refineries. In addition, the prospects of exploration grants tied to the degree of Canadian ownership promoted some acquisitions by making the ownership of energy companies more attractive to Canadian residents than to foreigners.

The Minister of Finance was concerned enough by the mounting outflow in the summer of 1981 to issue a formal request to Canadian banks and industry in general that "the pace of takeover activity diminish." The Minister called on Canadian banks "to reduce substantially the amount of their lending in which the proceeds are converted to foreign currency and used to finance takeovers." The Minister specifically exempted from his request "those loans that serve the objectives of Canadianization embodied in the National Energy Program." But he also noted that "the process of Canadianization was proceeding rapidly and some slowing of this pace would therefore be quite consistent with the energy policies of the government." The reasons given for the request were that the takeovers were contributing to downward pressure on the dollar and thus threatening to aggravate inflation, and were adding unnecessarily to upward pressure on short-term interest rates.[4]

The Department of Economics of the Bank of Montreal has made public some estimates of the impact on the economy of takeovers of foreign-owned firms. On the assumption of takeover-induced capital outflows of about $1.6 billion per quarter from October 1980 to June 1981, it was estimated that the Canadian dollar would be lower by about 1.5 cents U.S. A further 1.25 cents U.S. decline was estimated to result from the interest payments required to service the debt arising from these takeovers. If the capital outflows were to continue at the same pace, the dollar would stabilize at a level about 5 cents lower. An estimated 130 basis point increase in interest rates would be needed to offset the impact on the Canadian dollar of the initial capital flows. To counter the further 1.25 cents decline from interest payments would require an additional 70 basis point increase in interest rates.[5]

Looking ahead, the National Energy Program objectives of at least 50 per cent Canadian ownership of oil and gas production by 1990, and Canadian control of a significant number of the larger oil and gas firms, would seem to entail substantial continuing capital outflows. In the *National Energy Program: Update 1982* issued in May 1982 it was estimated that the various acquisitions of foreign-controlled companies by Canadian-controlled companies since October 1980 has amounted to $7.7 billion, reducing the level of foreign ownership by 6.7 percentage points to 65.3 per cent and foreign control by 10.8 percentage points to 66.9 per cent. Thus foreign ownership has been reduced by 0.9 percentage points and control by 1.4 percentage points for each $1 billion spent on acquisitions.[6] A rough estimate of the sum required to meet the 50 per cent ownership objective based on this experience would be $17 billion 1981 dollars over the next eight years, or more than $2 billion per year. To the extent that the Canadianization objective was reached through the more rapid growth of Canadian firms than foreign, or to the extent that low international oil prices depressed the capitalization of foreign oil companies, the required sum would be much lower. On the other hand, if international oil prices were to strengthen, the market value of foreign oil companies would also revive, and the required sum would be much higher.

The acquisition of foreign-owned companies by Canadians – Canadianization – substitutes debt for equity in the financing of Canada's external indebtedness. The first question that must be addressed is the financing of the shift. If the switch were financed by debt issuance abroad, then the direct impact of the transaction on the foreign exchange market would be offset. If it were financed in domestic markets, Canadian interest rates and the exchange rate would bear the burden of adjustment. This would be the immediate impact.

In the longer run the real sector of the economy would have to adjust. The depreciation of the exchange rate would tend to improve the current account of the balance of payments. This would serve to transfer the necessary resources abroad to pay for the acquisition of the foreign companies, at least to the extent that these acquisitions were not financed abroad. For the real resource transfer to take place, domestic savings would have to increase sufficiently to replace the lost foreign savings resulting from the improvement in the current account balance. Increased domestic savings could come from the business, personal or government sectors. They could be generated either on their own or as a matter of policy. Alternatively, increased demand from abroad due to the improvement in the current account balance, coupled with the same level of domestic demand with unchanged savings, could produce inflation that would itself tend to raise savings. If not, the exchange rate would continue to depreciate and no new balance would be struck between foreign and domestic demand and supply. This would obviously be unsustainable and the government would have to implement policies to secure balance.

The recent acquisitions of foreign-owned companies were financed primarily by borrowing U.S. dollars from Canadian banks. The reliance on bank loans was encouraged by the prevalence of high and variable interest rates, which made long-term financing unattractive. In addition, banks were willing to provide large loans on the short notice required for successful takeovers. For their part, the banks were able to raise the necessary funds on Euromarkets. This allowed them to match U.S. dollar assets with U.S. dollar liabilities and thereby minimize their exposure to exchange rate fluctuations.[7] But some of the funds required for acquisitions were obtained domestically, as reflected in the rapid growth of business loans by banks in 1981. Thus it is understandable that the Canadian dollar would come under immediate downward pressure as the result of Canadianization.

There is also the ongoing impact of the substitution of debt for equity on international payments to be considered. It is conditioned by the different characteristics of equity and debt capital. Equity capital usually carries a dividend yield somewhere in the zero to 5 per cent range. Debt capital is typically much more expensive from a cash flow point of view, costing as much as 20 per cent. Thus, the substitution of debt for equity results in an immediate increase in cash outflow related to the difference.[8]

On the other hand, equity and debt are two very different ways of financing the ownership of capital and have quite different implications. The holder of equity owns the capital, which is a real asset. In a period of inflation the value of capital can be expected to rise with prices in general, as will the income produced by the capital. Accordingly, dividends represent a real return and should also increase. In addition, since all profits are not paid out in dividends, there are retained earnings to consider. Interest payments, in contrast, are a fixed nominal return on a fixed nominal liability. With inflation, the value of both interest and principal erodes in real terms. Retained earnings and the erosion of the real value of nominal liabilities do not result in foreign exchange transactions, but they still have a direct bearing on the valuations of the Canadian dollar made in the market.

The upshot is that, given the different characteristics of the two kinds of financing, it is not so clear that the substitution of debt for equity capital will in itself result in a decline in the exchange rate in the longer run. Whether it will or not depends on many things, most notably the real rate of return on the equity capital relative to the real cost of funds.

If an acquisition yields more than it costs to finance, then it is profitable and should not in the long run exert a depressing influence on the Canadian dollar. In the particular case of an acquisition of an energy company holding oil and gas reserves, the rate of return will be higher if the price of energy increases in relative terms. This was the expectation underlying the National Energy Program that made Canadianization so appealing. In addition, if inflation were to escalate worldwide, then to the extent that the debt incurred to finance the acquisition was long-term, its real value and the associated financing costs would decline more quickly than anticipated and the Canadian dollar might even strengthen. To the extent that the debt was short-term or floating rate this would not be the case. Conversely, the acquisitions could turn out to be bad investments – if, for instance, the glut persists on international oil markets and the price of oil remains depressed. Or inflation could abate, leaving Canada locked into some long-term debt financed at high real interest rates. In either of these eventualities the Canadian dollar would suffer.

One indisputable impact of a switch from debt to equity financing of Canadian energy assets is that, as owners, Canadians would have to assume a greater share of the risk resulting from fluctuations in income. Debt interest is fixed and must be paid regardless of economic conditions, whereas equity is the residual claimant on income. Hence if profits decline, Canadians would have to absorb the total shortfall. This makes the economy more vulnerable to domestic and international shocks.

Moreover, to the extent that the debt financing is short-term, the Canadian dollar would be more exposed to the vagaries of short-term capital flows. This could make it more difficult to stabilize the exchange rate through monetary policy.

Not all capital flows are likely to exert a depressing influence on the Canadian dollar. Some of the large megaprojects on the drawing boards will require the mobilization of vast pools of capital, which Canadian financial markets might not be able to supply. Foreign financial markets will undoubtedly have to be tapped. This would result in large inflows of capital which, depending on the import content of the megaprojects, could put upward pressure on the exchange rate. To the extent that this capital took the form of debt, the exposure of the Canadian economy to fluctuations in income would be further enhanced.

There are a number of ways to ease the constraints imposed by capital flows on monetary policy. The most drastic would be to implement foreign exchange controls on capital transactions and perhaps on international travel. If this were done, it would be the first time since the wartime exchange controls were lifted in October 1950 that Canada would have restrictions on capital account transactions. While exchange controls were difficult enough to administer during wartime, the increasing sophistication of and interrelationships among international financial markets and institutions would multiply the administrative burden many times. Entrepreneurially inclined individuals and corporations could be expected to take advantage of the situation and find ways around the controls.

Exchange controls would impinge on the freedom of individual Canadians to travel and to invest their money where they see fit. This would likely be unacceptable, particularly if exchange controls were not being universally respected. Isolating Canadian financial markets from international ones would also have serious allocative costs, i.e. by reducing competition and thus undermining the efficiency with which capital is allocated. The ability of Canadian financial institutions to compete on world markets would be impaired.

The final and in some ways most telling argument against exchange controls is that they would probably not be able to do the job for which they were intended. They could not likely be implemented quickly enough to stem a large capital outflow such as erupted in the summer of 1981. If it were to become known that the government was even contemplating controls, not to mention starting to set them up, capital outflows could quickly turn into a hemorrhage. By the same token, exchange controls would not enable the Bank of Canada to lower Canadian interest rates relative to U.S. rates without sending the Canadian dollar into a nosedive. Traditionally, Canada has run a deficit on current account financed by a surplus on capital account. The capital inflow was attracted by higher interest rates in Canada than abroad. Exchange controls can, in theory, stop capital outflows, but they cannot force inflows. On the contrary, capital inflows might be discouraged by the prospects that foreign investors would not be able to repatriate their money.

A less blunt instrument for dealing with destabilizing capital outflows would be external debt management. The government could take the lead in borrowing abroad to finance any potentially disruptive capital outflow. This would to some degree be a natural extension of the traditional responsibility of government in using the exchange fund to smooth out fluctuations in the exchange rate. The government has already become accustomed to operating with fairly modest exchange reserves supplemented by credit lines with the major Canadian and foreign banks. The government draws on the credit line when necessary to support the Canadian dollar and repays the loan when the dollar strengthens. The credit line was used to finance exchange market intervention during the summer 1981 exchange crisis.

To stabilize the exchange rate in the face of large persistent capital outflows without raising interest rates to unacceptable levels, the government may thus have to offset the capital outflows by issuing a corresponding amount of its debt in external financial markets. Since a main potential source of capital outflows is the acquisition of foreign-owned oil and gas companies, encouraged as a matter of government policy, this course would certainly be appropriate. In effect, the government would simply be ensuring that the takeovers were financed in such a way as to not destabilize the dollar nor to distract monetary policy from the pursuit of its domestic objectives. This would in fact be fairly consistent with recent government practice. In 1978 the government issued about $2.5 billion of bonds payable in foreign currencies. In June 1982 the government issued a single Eurobond for $750 million. The main difference would be that much larger and more frequent foreign issues would be necessary to finance a steady outflow of funds for Canadianization. Provincial governments might also be asked to help by coordinating their own foreign borrowings with the federal government's external debt management activities.

Other suggested policy moves, designed to support the Canadian dollar and give monetary policy more room to manoeuvre, are: slowing the pace of the Canadianization program itself; and increasing gas exports. Although these moves would probably raise the value of the dollar, they involve many more issues than just exchange rate stabilization. Accordingly, they must be examined on their own merits with their impact on the exchange rate only a supplementary consideration.

Consistency of Money Growth Targets and Projected Income

Another issue relating to monetary policy, which arises in the medium term, is the consistency of the money growth targets with projected nominal income growth. The Bank of Canada's current 4 to 8 per cent target growth range for M1 is much lower than the more than 10.5 per cent annual income growth expected on average over the next five years in the projection reported in Chapter 2. In addition, the Bank has in the past adopted the practice of progressively reducing the targets each year.

If the Bank were to succeed in keeping M1 growing at the 6 per cent implied by the middle of the present range, there would be an almost 5 per cent gap between the growth of money and nominal income. To bridge this gap would require that the velocity of money turnover (defined to be equal to GNP divided by M1) increase correspondingly. There are two mechanisms whereby this could happen. First, velocity could increase on its own because of reductions in the public's demand for money balances at any income level. This could result from changed asset preferences of the public or from an increase in the availability of M1 substitutes. The gap would not be bridged if the Bank of Canada reacted to the decline in money demand by correspondingly lowering the monetary target. Second, velocity could increase as rising interest rates cause individuals and corporations to economize on their holdings of money balances.

Over the six years from 1975 to 1981, velocity rose by around 4.5 per cent per year (Table 5-1). The largest part of this rise in velocity can be attributed to the steady climb in short-term interest rates. For instance, the three-month treasury bill rate rose from 7.37 per cent in 1975 to 17.77 per cent in 1981, an average increase of about 1.75 per cent per year. The causation here runs from constrained money growth to higher interest rates and increased velocity.

If money growth were held on target in the medium term and interest rates rose by the amount suggested by historical experience, it is hard to see how nominal income growth could be as strong as projected. Consumer spending on cars, appliances and other durables, home purchases, and expenditures on plant and equipment would certainly be depressed by rising interest rates and exert a drag on economic activity. This is the crux of the consistency problem. Its resolution would have to come from a combination of lower inflation and slower real growth. But this is not as straightforward as it may seem. The coefficient

Table 5-1

Average Annual Growth in Money, Income, Velocity, and Interest Rates, Canada, 1976-81

	1976	1977	1978	1979	1980	1981	Average, 1976-81
				(Per cent)			
M1[1]	7.9	8.4	10.1	6.9	6.3	4.1	7.3
Income - GNP	15.5	9.3	10.4	13.5	11.6	13.5	12.3
Velocity[2]	7.1	0.8	0.3	6.2	5.0	9.1	4.7
Three-month treasury bills							
Interest rate	8.90	7.35	8.59	11.55	12.75	17.77	...
Change over previous year	1.53	-1.55	1.24	2.96	1.20	5.02	1.73

1 Currency and demand deposits.

2 Defined as GNP divided by M1.

Source Estimates by the Economic Council of Canada, based on data from the *Bank of Canada Review*, various issues.

on the interest rate in most money demand functions yields a much less than one for one trade-off between nominal income growth stemming from inflation and interest rates. Hence, with a fixed growth trajectory for the money supply and declining nominal income growth due to a slowdown in inflation, nominal interest rates decline less than inflation and real interest rates (defined to be nominal interest rates minus inflation) must be rising. So even lower inflation does not provide short-term relief from the depressing effect on real activity of money supply growth targets that are low in relation to projected income.

Reasonable real growth can be achieved in the medium term only if real interest rates do not go too high and stay up too long. Otherwise investment, housing construction, stockbuilding and consumer expenditures will not be sustained at a high enough level and expand sufficiently to maintain real growth. For this to occur, nominal interest rates must be allowed to come down as inflation recedes or, alternatively, real interest rates must not be permitted to rise.

There is a transition problem in going from a situation of high inflation and high nominal income growth to one of low inflation and low nominal income growth with unchanged real growth by gradually reducing the rate of growth of the money supply.[9] This problem arises even if an incomes policy is used to supplement monetary restraint, as in the current circumstances. For nominal interest rates to decline in step with inflation, leaving real interest rates unchanged and determined by such nonfinancial factors as savings patterns and the productivity of investment, the rate of growth of the money supply must for a time exceed the rate of growth of nominal income in the new low-inflation environment. The other possibility would be for inflation to slow down below its new low-inflation equilibrium for a time. Because of the inertia of inflation, this would be more difficult to engineer than a temporary spurt of money growth.

The magnitude of the transition problem involved in returning to price stability from current high inflation rates can be strikingly illustrated with the aid of a simple numerical example. If inflation were to drop miraculously from 10 per cent to zero overnight, the money supply would have to increase by around 30 per cent (according to one middle-of-the-road estimated money demand function)[10] for interest rates to decline by the 10 percentage points necessary to leave real interest rates unchanged and to avoid depressing real activity in the economy. Alternatively, the same result could be achieved by a once-and-for-all decline in the price level of about 30 per cent, which would increase real money balances and thus lower interest rates by the required 10 percentage points. Given the downward rigidity of prices, a price level decline of this magnitude is even more unlikely than the assumed disappearance of inflation. Nevertheless, it does serve to underscore the dimension of the imbalance between money supply and money demand that can develop with large reductions in inflation.

Shifts in the Demand for Money

The relationship between money demand on the one hand, and nominal interest rates and income on the other, is critical for monetary policy. For monetary targetry to work smoothly this relationship must be stable and predictable. Only then can the central bank pursue its money growth targets with the assurance that variations in interest rates will be in the right direction to dampen fluctuations in nominal income. If a money growth target is set to be consistent with a given rate of inflation and potential real growth and if nominal income grows more rapidly due to inflation, then interest rates will rise to choke off the excessive growth of nominal income. On the other hand, if real growth turns out to be weaker than potential and inflation is as expected, then interest rates will decline, encouraging spending. Thus a monetary growth rate target can help to stabilize economic activity.

However, if money demand is not stable, a simple money growth rule will not be stabilizing. For instance, if money demand declines for any given level of income and interest rates, and if the money supply remains on an unchanged target path, then initially interest rates will decline, eventually stimulating real growth and nominal income and ultimately pushing up prices. In this instance, a monetary policy based on a money supply growth target is destabilizing and inflationary. The way out of this dilemma is to measure accurately the shifts in the demand for money and modify the money supply growth targets accordingly to take the shifts into account.

From a different perspective, downward shifts in the demand for money are important because they can help to ease the ostensible inconsistency between stated money growth targets and high nominal income growth resulting from the inertia of the inflationary process. Viewed in another way, reductions in the demand for money raise velocity. In 1976 and 1977, a downward shift occurred as corporations took advantage of newly available improved cash management facilities to minimize their holding of demand deposits. One estimate puts the decline in money demand from this source at 7.9 per cent after two years.[11] More recently, with the availability of daily interest savings accounts in late

1979, individuals have begun to cut back on their holdings of personal chequing accounts to benefit from the interest paid on these new accounts. The Bank of Canada estimated in its 1981 Annual Report that the growth of daily interest savings accounts lowered money demand by some 2 per cent. The spread of cash management services to small and medium-sized businesses has also decreased the demand for money. Yet another recent development that could significantly lower the demand for money was the introduction of daily interest chequing accounts by the major banks in July 1980. Since these accounts pay interest, they are not included in M1. By December 1981 they amounted to $675 million, or 2.5 per cent of M1. More important, they have been growing extremely rapidly since their introduction.

The advent of daily interest savings and chequing accounts is of major significance for the conduct of monetary policy. The payment of a competitive interest rate on a daily basis on a transactions account or on an account from which funds can be readily transferred to a transactions account with no interest penalty will certainly influence the public's proclivity to hold transactions balances, as well as the composition of these balances. In an inflationary environment with high nominal interest rates, a demand deposit bearing no interest may come to look increasingly unattractive. With daily interest savings accounts providing a competitive return on cash deposited even for very short periods of time, there should be an additional incentive to minimize holdings of non-interest-paying demand deposits. This incentive will be reinforced as banks offer individuals cash management services previously available only to corporate clients. Another development that will have a bearing on the demand for money is the eventual evolution of a system of electronic funds transfer. At this point its impact is still open to speculation.[12]

A precise estimate of the likely future magnitude of these financial market innovations on the demand for money would be impossible to make in advance, but it could very well be large. In the future, M1 could quite easily become an increasingly less comprehensive and perhaps less reliable indicator of the transactions demand for money.

The Bank of Canada acknowledges that shifts in demand complicate the interpretation of short-term fluctuations in M1. But the Bank "expects that it will be possible to identify and take sufficient account of shifts to preserve the usefulness of M1 as a longer-run policy target."

The problems of interpreting M1 growth were compounded following the introduction of a newly revised statistical reporting system for banks in November 1981. For a time, M1 was underestimated for technical reasons relating to the measurement of float. (To calculate M1, it is necessary to eliminate the double counting arising from cheques deposited in one account but not yet debited to another.) The correction of this underestimate raised the level of M1 as early as July 1981 by amounts ranging from $300 to $600 million.[13] Such measurement uncertainties made the Bank reluctant "to draw inferences about monetary conditions from the recent pattern of M1 growth beyond those that can be confirmed by other economic and financial indicators."

Strategies for Controlling Money Supply Growth

Concern about the meaning of M1 as a monetary indicator has led Thomas Courchene of the University of Western Ontario to recommend that at the very least the Bank consider switching to an extended definition of M1 as its preferred aggregate for purposes of monetary control. The extended M1 would encompass all close substitutes for the existing M1. Courchene's reservations about M1 run still deeper than this. He believes that, even putting aside the complications caused by shifting money demand due to financial market innovations, the high degree of interest sensitivity of a narrow aggregate such as M1 could make its trend growth a misleading indicator of the amount of monetary stimulus provided by the central bank. Consequently, he argues that the Bank of Canada should opt for controlling a broader aggregate and consider doing this by operating directly on the monetary base and not through manipulating short-term interest rates as is currently the practice.[14]

Courchene's proposal is interesting and certainly merits serious consideration. But the experience of the United States since embarking on base control does suggest that the application of this approach can produce extremely wide fluctuations in interest rates and can have a very destabilizing effect on the economy. The extent to which this results from institutional features unique to the United States and the degree to which it might also be applicable to Canada would have to be assessed.

The issues of narrow vs broad monetary aggregates as intermediate targets for monetary policy and interest rate vs base control have long been debated. Narrow aggregates such as M1 have the virtue of being controllable by manipulating short-term interest rates. By minimizing the necessary changes in operating procedures, this facilitated the Bank of Canada's changeover in the mid-1970s from a monetary policy based on interest rates to one based on monetary targetry. Increases in interest rates promote substitution of interest-bearing assets for non-interest-bearing narrowly defined money, thereby reducing holdings. The same process works in reverse for decreases in interest rates. Subject to lagged responses to interest rate changes, it is a manageable task to steer a narrow aggregate along a target growth path. The same cannot be said for a broader aggregate, some of the components of which are themselves interest-bearing.[15]

Increases in interest rates can lead to increases in the broader aggregates if chartered banks are induced to bid aggressively enough for deposits by raising the interest rates paid on them. A possible paradoxical result is that a tightening in monetary policy could lead to an increase in money growth in the short run. In the longer run, higher interest rates might be expected to slow the growth of the broader aggregates by putting the damper on economic activity and curtailing the growth of income. An additional disadvantage of broader aggregates as a guide for policy, according to the Bank of Canada, is that they are even more subject to shifts in demand than M1. This would make it more difficult to interpret their growth relative to any target that might be established.

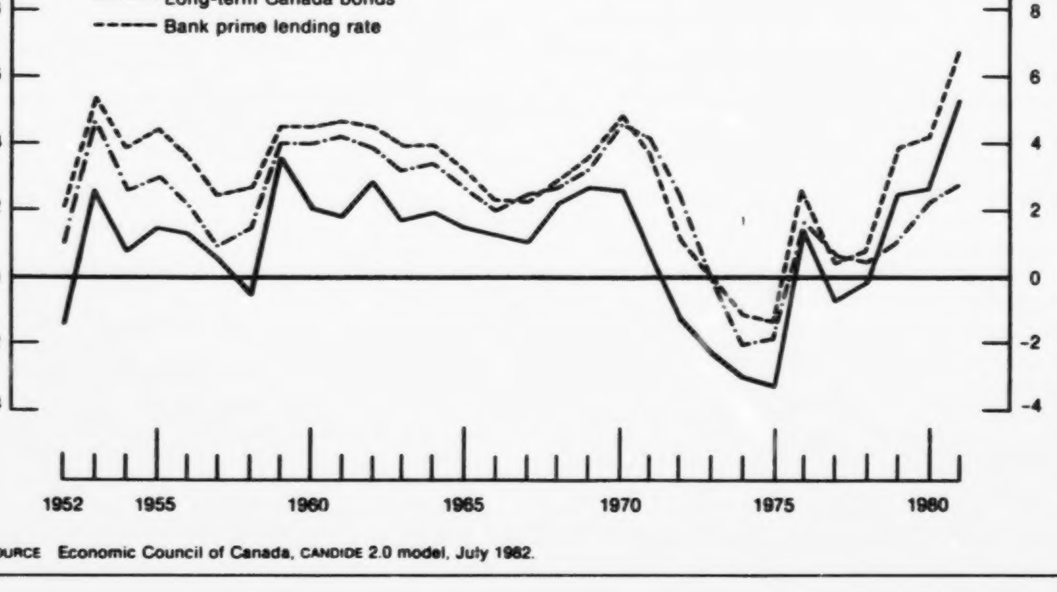
Base control is completely different. Banks are advised that the central bank will allow its own liabilities, which comprise the reserves that banks must hold to support their deposit growth, to grow at only a certain prespecified rate. If banks as a whole seek to expand their loans and deposits more rapidly, they will have to borrow reserves from the central bank at a penalty rate sufficiently high to deter them from expanding too quickly. To make monetary base control work smoothly, it might be necessary to modify the institutional arrangements under which banks operate.

Abolition of lagged reserve accounting and the establishment of uniform reserve ratios for all types of deposits are the two specific changes most often mentioned. As noted above, in the absence of these changes, base control can be associated with a high degree of interest rate volatility. Indeed, even with these changes there is a likelihood of considerable volatility unless the public begins to adjust its demand for money much more quickly to interest rate variations than it has in the past.

The difficulties of interpreting monetary aggregates in the face of the ongoing process of adjustment to

Chart 5-2

Real Interest Rates, Based on the Consumer Price Index, Canada, 1952-81



SOURCE Economic Council of Canada, CANDIDE 2.0 model, July 1982.

financial innovations, and the problem of consistency between money supply growth targets and projected nominal income growth in the medium term, underline the need to continue to monitor a wide range of indicators to assist in the conduct of monetary policy. These indicators would encompass the exchange rate, nominal and real interest rates, and the broader monetary aggregates, as well as M1. It will also be important to interpret these indicators in the light of economic performance with respect to inflation, real growth, unemployment and the balance of payments.

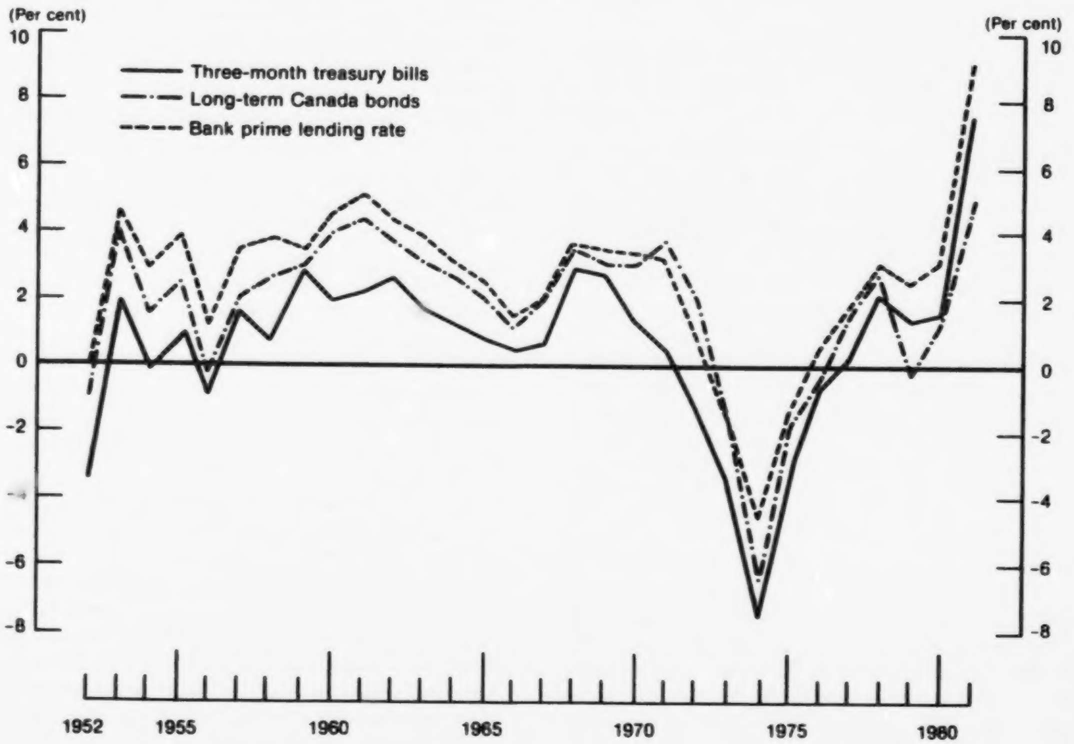
Real Interest Rates as Supplementary Indicators of Monetary Policy

One set of indicators that deserves more attention is real interest rates. They give a somewhat different perspective on monetary policy than some of the other indicators. Real interest rates can be defined in a great variety of ways depending on the particular interest rate and price index chosen. They are calculated as the difference between the interest rate and inflation. The latter can be expressed on the basis of either actual or expected inflation. Theoretically, expected inflation should be used in calculating real interest rates, since it is this definition that has the most bearing on the behaviour of economic agents. But this definition has the drawback of being the most difficult to measure, so real interest rates calculated using the actual rate of inflation are presented here.

The historical record for some different definitions of real interest rates is shown in Charts 5-2 and 5-3.

Chart 5-3

Real Interest Rates, Based on the GNE Deflator, Canada, 1952-81



SOURCE Economic Council of Canada, CANDIDE 2.0 model, July 1982.

The interest rates included are: the three-month treasury bill rate, a short-term rate; the yield on Government of Canada bonds with more than 10 years to maturity, a long-term rate; and the prime lending rate of chartered banks, an indicator of the cost of bank credit. Real interest rates are calculated using the annual percentage increase in the consumer price index and the GNE price deflator, the two most widely used price indices. The consumer price index measures the prices paid by consumers; the GNE deflator measures the price of Canadian production.

The profile of real interest rates over the 1952-81 period exhibits certain characteristic features regardless of the particular interest rate or price index used. Real interest rates dropped significantly in 1956. They then recovered and remained fairly stable – and, by and large, significantly positive – throughout the late 1950s and 1960s. It was only in the early 1970s that real interest rates started to plummet in the face of accelerating inflation, falling to significantly negative levels in 1974 and 1975 at the height of the inflationary run-up. Real interest rates then gradually rose again, with most definitions attaining significantly positive levels by 1978 and all by 1980. In 1981 real interest rates reached their highest levels in the postwar period. They have since receded from their peak, but continue to run very high.

The fluctuations in real interest rates themselves are clear enough. Their meaning as an indicator of monetary policy, however, is not so transparent. But a reasonable interpretation, broadly consistent with some of the Bank of Canada's own statements on the stance of monetary policy, can be advanced. It is that the low and declining real rates of interest in the early to mid-1970s are indicative of an overly expansionary monetary policy; and that the slow rise in real interest rates from admittedly low negative levels following the Bank of Canada's adoption of a strategy of monetary gradualism was a move in the right direction of a more restrictive monetary policy, but that in retrospect this move might have been too gradual. The level of real interest rates also suggests that it is only over the last few years that monetary policy has really become restrictive.

Real interest rates do shed some interesting light on the stance of monetary policy. They provide useful supplementary information which sometimes confirms and at other times contradicts that provided by the growth of M1, the Bank's preferred monetary target. In the early to mid-1970s, both the growth of M1 and the level of real interest rates indicated that monetary policy was very expansionary. In the late 1970s the growth of M1 suggested that monetary policy was very tight, but real interest rates suggested that it was not. As noted above, the Bank of Canada has argued that the demand for money may have shifted down during 1976 and 1977 owing to the greater use of cash management facilities by corporations. This would cause M1 to give misleading signals on the tightness of monetary policy. Monitoring real interest rates as well as M1 would help to identify such misleading signals before monetary policy was led too far astray.

If real interest rates are to be a useful supplementary indicator of monetary policy, it is necessary to develop a view as to what would constitute the most appropriate level for real interest rates somehow defined. Negative real interest rates for any sustained period would appear to be inconsistent with an anti-inflationary posture for monetary policy. Real interest rates should as a result probably be maintained on average at positive levels. James Tobin of Yale University proposed an operational rule for monetary policy in the United States of maintaining real short-term interest rates at about 2 per cent.[16]

In Canada, real short-term interest rates, measured by the yield on three-month treasury bills, from 1952 to 1970 averaged 1.5 per cent more or less depending on whether the consumer price index or GNE deflator was used. Since this was a period of relatively low but gradually accelerating inflation, it could be argued that somewhat higher real interest rates might be desirable to counter inflation. But how much higher would be impossible to predict.

The central bank would have to rely on judgment in conducting monetary policy. Real interest rates should be held high enough to keep an adequate degree of slack in the economy to control inflation, but not so high that the interest-sensitive sectors of the economy such as durables, cars, housing and investment are unduly depressed. It is especially important not to constrain investment too much. Obviously, if enough productive capacity is not put in place, the economy can easily run into bottlenecks with inflationary consequences very early in any recovery.

The task of ascertaining the roughly appropriate level for real interest rates is further complicated by the absence of a stable and unique relationship between real interest rates and aggregate demand. The evidence suggests that in many sectors nominal as well as real interest rates have an impact on demand. This stems from cash flow considerations. It is probably most evident in the market for housing, where an increase in the expected rate of inflation – and thus in nominal interest rates – "tilts" the effective carrying cost of the equal-payment mortgage in such a way as to price many potential borrowers out of the market. A rise in the nominal mortgage rate, by increasing the required ratio of carrying costs to the household's income, curtails demand even if the real mortgage rate remains constant. This same "tilt" effect would apply to spending on consumer durables and investment.

The determination of the appropriate level of real interest rates is also complicated by tax considerations. With a prime rate of 17 per cent, the after-tax cost for a large corporation paying corporate tax at a 48.3 per cent rate would be only 8.8 per cent; for a small private corporation paying the small business rate of 25 per cent the after-tax cost would be 12.75 per cent. Critical questions are, what is the most relevant measure of cost of funds – before-tax or after-tax – and how might it differ across the components of demand?

The pre-tax rate is relevant for the vast majority of residential mortgages for owner occupied housing, since mortgage interest payments are not tax deductible. The after-tax rate might be more relevant for corporate and other borrowers for whom interest payments are tax deductible. On the other hand, there are other inflation-related factors that may limit the demand for loanable funds. The most apparent of these is the inflation-induced increase in the effective tax rate on corporations resulting from the overstatement of corporate profits due to the use of historical cost accounting for capital consumption allowances and inventories. Since after-tax real rates of return would also be reduced by the interaction of taxation and inflation, after-tax real interest rates may not be as closely and systematically related to corporate demand for real investment as before-tax real interest rates.

To take proper account of complicating factors, it is necessary to exercise a good deal of judgment in assessing the appropriateness of real interest rates. Nevertheless, if the economy is being pushed against capacity ceilings or, alternatively, being dragged down by interest-sensitive expenditures, then it is easy enough to decide that the level of real interest rates is probably either too low or too high. It is the in-between cases that are more difficult to judge.

Stabilizing the economy may require cyclical fluctuations in real interest rates. A monetary growth rule has the advantage of automatically producing stabilizing fluctuations in interest rates. It causes interest rates to fall in a recession, stimulating activity, and to rise in a boom, restraining real growth. It may be desirable for real interest rates to exhibit similar stabilizing patterns.

Conclusions on Real Interest Rates as Supplementary Indicators

Real interest rates could be important indicators of the degree of restraint or ease being exerted on the economy by monetary policy. As such they might be of assistance to the central bank in deciding where in the target range to steer the money supply. If real interest rates were judged to be too high, the money supply could be allowed to drift up to the top of the range; if too low, to drift down. Actual and projected real interest rates would also be helpful to the central bank in deciding when and how to modify the money supply growth targets.

Real interest rates should not necessarily replace the growth of M1 as the main indicator of the stance of monetary policy. As the Governor of the Bank of Canada noted in the Annual Report for 1981, "M1 is particularly useful as a check against cumulative error in monetary policy over the longer term." It is important that the Bank continue to pursue its strategy of restraining the growth of the money supply to within certain specified limits. The Bank of Canada has established a high degree of credibility for itself as an inflation fighter through the pursuit of this strategy. The public has learned that the Bank will not accommodate inflationary wage and price increases. Nothing should be done to jeopardize this progress. A greater and more explicit reliance on real interest rates as monetary indicators would have to be integrated into the current approach.

It will also remain important to continue to take the exchange rate into consideration in conducting monetary policy. Inflationary impulses stemming from excessive declines in the foreign exchange value of the Canadian dollar cannot be ignored. Valuations in the exchange market are to a significant extent based on that intangible and elusive concept, confidence. The Bank of Canada must stand ready to defend the Canadian dollar if a crisis develops. Except in extraordinary circumstances, this readiness in itself should prove sufficient to prevent such crises from developing.

In the longer run though, the exchange rate will have to be left to find its own level consistent with the underlying balance of payments situation, and monetary policy will have to focus on domestic stabilization objectives. It is here that greater reliance on real interest rates would be helpful. Putting greater emphasis on real interest rates would imply a greater willingness to resist upward pressures on interest rates emanating from the United States. It would temper the margin by which nominal interest rates would be allowed to exceed inflation. By the same token, if real interest rates were lower, it would provide more explicit justification for resisting domestic political pressures to push down interest rates more than would be warranted by declining inflation.

Fiscal Policy

Fiscal Strategy of Expenditure Restraint and Deficit Reduction

The government's fiscal strategy has been designed to support monetary policy in fighting inflation and has thereby become more restrictive. Since the first budget brought down by the present government in October 1980, fiscal policy has been cast in terms of expenditure restraint and deficit reduction. The November 12, 1981 budget moved to reinforce this stance by stepping up the pace of deficit reduction. The budget forecast a reduction in financial requirements from $10 billion in fiscal 1981/82 to $6 billion subsequently and a decline in the budgetary deficit from $13 billion in 1981/82 to $10 billion thereafter.

The reduction in the deficit was to be accomplished through tax measures introduced in the budget, and the buildup in energy revenues from the National Energy Program and subsequent provincial energy settlements. Tax measures contained in the November 1981 budget were estimated to increase revenues by $1.4 billion in 1982/83 and $2.1 billion in 1983/84. The revenue increase was expected to fall off to $1.1 billion by 1985/86 because of the nature of the measures themselves, some of which are temporary while others pull revenue forward in time. The September 1981 energy settlement was estimated in the budget to generate $900 million in 1982/83 and $1.5 billion in 1983/84. In May 1982, in its *National Energy Program: Update 1982*, the government reduced certain of the energy taxes in order to provide some relief to the industry. This relief was estimated to cost $385 million in 1982 and $615 million in 1983.

Provincial governments with deficits have also been taking steps to reduce them. Provincial budgets in 1982 have raised consumption taxes (retail sales, tobacco and alcohol), income taxes, medicare insurance rates and motor vehicle licence fees. Major revenue-generating measures include the extension of the retail sales tax and the increase in medicare premiums in Ontario, and the increase in the retail sales tax rate from 8 to 9 per cent for 10 months in Quebec. On the other hand, corporate taxes and motive fuel taxes have been reduced on a net basis. The biggest corporate tax reduction was in Ontario, where small business was given a two-year tax exemption. Other expansionary measures contained in recent budgets were selective increases in spending for housing assistance, job creation and infrastructure investment. Nevertheless, on balance, the attempts of provincial governments with deficits to curtail them have outweighed expansionary initiatives; thus provincial budgets provide an additional element of fiscal restraint. The impact of these budgets will be to lower real growth. The consumer price index will also reflect the indirect tax increases contained in the budgets.

The Recession and Lower Oil Prices Will Raise the Deficit

Events since November 1981 have overtaken the government's strategy of deficit reduction. The two events with the most significant impact on the government's fiscal position are the recession and the present and prospective lower levels of international oil prices. Real GNE was forecast in the June 28, 1982 budget to decline by 2 per cent in 1982. This contrasts sharply with the more than 2 per cent real growth forecast by the government in the November 1981 budget. The Minister of Finance estimated in the June 28, 1982 budget that the revenue loss attributable to the recession would be about $4.5 billion in fiscal 1982/83 and the related increase in unemployment insurance benefits about $2 billion. Lower international oil prices and the lowering of energy taxes announced in the 1982 NEP *Update* were estimated by the Minister to reduce federal revenues by $1.5 billion.

The main elements affecting expenditures since the November 1981 budget were, according to the Minister, the deferral of some 1981/82 energy expenditures, which is expected to add $1.1 billion to this year's spending, and higher interest rates, which are anticipated to raise public debt charges by $1.1 billion.

The overall impact of these developments on the projected government deficit is fairly dramatic. The Minister announced in the June 28, 1982 budget that the deficit for the 1982/83 fiscal year is now projected at $19.6 billion, more than $9 billion higher than forecast last November, and that financial requirements are now projected to be $17.1 billion, or $10.5 billion higher. The budgetary deficit represents 5.4 per cent of GNP and financial requirements 4.8 per cent of GNP. This is the same share of GNP as the previous record deficit incurred in fiscal 1978/79.

The budget deficit in Canada is almost twice as high relative to GNP as the 3 per cent of GNP accounted for by the $101.9 billion unified budget deficit in the United States estimated for fiscal 1982/83. On the other hand, the personal savings rate in Canada is expected to be much higher than in the United States – projected at 13.1 per cent in 1982 in Canada vs 6.3 per cent in the United States. Thus, in relation to personal savings, the Canadian budgetary deficit does not compare so unfavourably with that in the United States.

Discretionary measures contained in the June 28, 1982 budget will reduce the deficit, particularly in the medium term. The budget's new expenditure initiatives, the increase in the child tax credit, adjustments to the November 1981 budget measures and the new proposal to index certain investment income are to be financed through a limitation on the indexation of the personal income tax and through expenditure-saving measures, such as the compensation restraint program, limitations on indexing of major transfer programs, and reductions in foreign aid and defence spending. Although these reallocations leave the deficit unchanged in fiscal 1982/83, they begin to lower it thereafter. In 1983/84 the reduction will be a relatively modest $785 million, but by 1984/85 it will become more substantial. This results from the two-year temporary nature of the new expenditure measures and the cumulative effect of the limitation on indexation. The extra revenue from the indexation limitation on personal income tax should be about $2 billion in 1984/85 and the saving in transfers about $500 million. Combined with the other expenditure cuts, this should yield a roughly $3.5 billion reduction in the deficit in 1984/85.

In the June 28, 1982 budget the Minister of Finance provided a fiscal forecast only for the current fiscal year. This has contributed to much speculation about the future trajectory of the deficit. Our own analyses with CANDIDE suggest that on a national accounts basis the deficit will increase in absolute terms but will remain stable as a share of GNP. The reason that the recession-induced increase in the deficit will not unwind is that the recovery is projected to be relatively weak; thus lost revenues will not be recouped over the forecast horizon. Moreover, even if the economy were to grow rapidly enough to regain 1981 levels of utilization, the deficit would still remain higher than targeted in the November 1981 budget because of the erosion in energy revenues resulting from lower international energy prices.

The break in the international oil price is an event of major and potentially continuing significance. The worldwide recession and energy conservation have cut back oil demand and created a state of excess supply in international crude markets. This has led to some price cutting by OPEC members with large foreign currency requirements for ambitious development programs. In the spring of 1982, large volumes of oil were being sold well below the official $34 U.S. per barrel at which the benchmark price for Saudi Arabian light crude had been frozen by agreement of OPEC members. The spot price of oil has since firmed up. The effective decline in the international price of oil has contrasted sharply with the federal government's working assumption of a 2 per cent real increase. This assumption was originally made when the National Energy Program was being developed and international oil markets were tight. To provide a stable basis for negotiations, this assumption was maintained until a settlement on energy pricing and revenue sharing was reached with Alberta. It subsequently found its way into the November 1981 budget. However, it became increasingly evident, as the recession deepened and international oil markets softened, that the assumption was becoming less tenable in the short run and had only inertia in its favour.

The mechanism whereby the government will lose revenues and the deficit will increase as a result of lower international oil prices merits some elaboration. As part of the National Energy Program and subsequent agreements with the provinces, the federal government established a schedule of increases in the wellhead price of oil, as well as related natural gas price increases. The wellhead price of a barrel of oil was to rise by $2.25 in both January and July of 1982 and by $4 every January and July thereafter through 1986, subject to the condition that the price plus transportation to Montreal would not exceed 75 per cent of the international price. In contrast, for natural gas there was a fixed schedule of price increases of 25 cents per thousand cubic feet (mcf) every six months commencing February 1, 1982.

With the lower international oil price now in prospect, the wellhead price of oil is expected to hit the 75 per cent of international price cap in 1983. It will thus not increase as much as anticipated in the energy agreements. On the basis of our current assumed trajectory for the international price of oil, the wellhead price of oil will be more than $15 per barrel below the schedule by 1986.

With a lower wellhead price, the federal government would get less revenue than expected from the corporate income tax and the Petroleum and Gas Revenue Tax, both of which are directly related to production revenue at the wellhead. Provincial governments would receive lower royalties from oil production. The federal government would also receive less revenue from the Incremental Oil Revenue Tax. This tax, which is levied at a rate of 50 per cent on incremental old oil revenues after a deduction for related Crown royalties, yields revenues only to the extent that the actual wellhead price increase exceeds that originally scheduled under the National Energy Program. It has been temporarily suspended from June 1, 1982 to May 31, 1983. The revenue source that would be most substantially reduced, if not eliminated, by smaller increases in domestic oil prices is the Natural Gas and Gas Liquids Tax. This tax is set taking into account the price of natural gas and crude oil at Toronto so as to establish a 65 per cent parity between gas and oil. Since a fixed schedule of price increases for natural gas is established and gas prices are not linked to oil prices, a lower blended crude oil price resulting from both lower wellhead and international prices means less taxing room for the Natural Gas and Gas Liquids Tax. Thus the rate must be set lower to maintain parity, and revenue is reduced.

Should the Larger Deficit Be Accepted?

The recession has raised the deficit sharply. Apart from the cyclical increase in the deficit, there is the structural issue of the role of energy revenues in financing government. Increasing energy revenues were the mainstay of the government's strategy of deficit reduction. Lower international oil prices are undercutting these revenues and will make it necessary for the government to rethink its strategy. The question of whether the large deficit should be accepted will have to be addressed. There are a number of options available.

The government could seek to limit the increase in the deficit by not allowing energy revenues to be eroded by lower international energy prices. This would require some restructuring of energy taxation. Further discussions with the provinces would be necessary to revise the energy agreements. The most obvious and, in many respects, the best way to preserve government energy revenues and to prevent the government deficit from ballooning would be to suspend the limitation of the domestic wellhead price to 75 per cent of the international price. This would ensure the continued growth of federal government energy revenues from the corporate income tax, the Petroleum and Gas Revenue Tax, and the Natural Gas and Gas Liquids Tax. The governments of the energy producing provinces would also receive additional corporate income tax and royalties on energy production. Hence, they should be willing to go along with a federal proposal to suspend the cap.

If the cap of 75 per cent of the international price for the domestic wellhead price of oil were to be suspended, the federal national accounts deficit would be $155 million lower than otherwise in 1983 and $1.1 billion lower by 1985. This would still leave the federal government with a large deficit in the medium term, but it would be somewhat reduced. A cost of pursuing this strategy is that the consumer price index would increase by an additional 0.1 per cent in 1983 and an extra 0.6 per cent at the peak in 1985. Real GNE would be 0.2 per cent lower in 1984 and 0.4 per cent lower in 1985.

The government could go one step further and try to transform the decline in international oil prices from a fiscal liability to a fiscal asset by maintaining the Petroleum Compensation Charge at its current level instead of reducing it by the amount needed to bring the Petroleum Compensation Account back into balance (as required in the energy agreements). As a result, the reduced Petroleum Compensation Payments to subsidize eastern Canadian oil consumption resulting from weaker international oil prices would strengthen the federal government's fiscal position. The provinces could be expected to strongly resist this course of action, however.

The government could also seek to achieve its deficit reduction objectives through expenditure cuts or further tax increases. Expenditure restraint is an important element in the government's anti-inflationary stance. It clearly demonstrates that the government is restraining its own demands on the economy while imposing restraint on the private sector. But it would not be possible to go much further than this and make major cuts without affecting key social programs.

Tax increases are another matter. The recession has been deep. It has left a legacy of unemployment and idle capacity in its train. Growth will resume, if it has not already, but there are doubts about whether it will be strong enough. Substantial tax increases could weaken the recovery further. This is a strong argument against additional tax increases at this time.

With larger than expected deficits in prospect and the possibility that tax increases would stifle the recovery, the government would appear to be boxed in, at least in the short run. Larger deficits will have to be accepted. Fears that larger deficits will crowd out investment must be put aside. In a recession, larger government deficits do not crowd out investment but merely absorb excess savings. Indeed, given the high rate of personal savings and the low level of investment by the private sector in current circumstances, government has an important responsibility to rechannel savings and prevent the alternative of an even more drastic decline in economic activity.

To accept larger deficits in the present circumstances is not to throw in the towel in the fight against inflation. It is important to remember that those larger prospective deficits are, to a significant extent, due to automatic stabilizers that support economic activity during a recession. As output weakens so do tax revenues, while unemployment insurance benefits rise, thus increasing the deficit. (Unemployment insurance, however, has become less important as a tool of macroeconomic stabilization, as we discuss in the next section.) Since the worsening in the deficit reflects cyclical conditions, it can be expected to decline if the economy recovers fully. The government need not take offsetting action to reduce the cyclical component of the deficit. The anti-inflationary stance of fiscal policy is not compromised by the functioning of automatic stabilizers.

And to the extent that the larger deficit stems from lower international oil prices, it is not inflationary. Lower international energy prices will reduce imported inflation and may mean lower domestic energy prices if the government does not act to preserve energy revenues. If the government wishes to rely so heavily on extremely variable energy revenues, it will have to be prepared to accept wider fluctuations in the deficit. The alternative would be periodic large and destabilizing shifts in fiscal policy.

Another consideration mitigating the inflationary implications of not reducing the deficit as quickly as planned is that in times of high inflation a large deficit does not indicate an overly expansionary fiscal policy. The government deficit is overstated by the inflation premium component of nominal interest payments on the public debt, which is necessary to compensate government bondholders for the decline in the real value of their holdings and which, in effect, constitutes an early repayment of principal. The magnitude of this overstatement is substantial. In Chapter 1 we estimated that it amounted to 2.5 per cent of GNP in 1981 – more than the 1981 federal government deficit.

Furthermore, it is important to consider the total government sector deficit. Over the 1975-81 period, the deficit for the overall government sector ranged from a low of 1.2 per cent of GNE in 1981 to a high of 3 per cent in 1978. For this year, we have projected the deficit at 4.3 per cent of GNE. The growth arises largely from the increase in the federal deficit to more than twice its level of a year ago. While provincial government accounts will move into the red this year, the combined deficit of provincial and local governments and hospitals will be comparatively modest. The accounts of the government sector also include the surplus generated by the Canada and Quebec pension plans, which will total almost $4 billion in 1982. It is important to recognize the exceptional nature of the influences on government revenue and expenditure over 1982, and that the national accounts deficit is not likely to increase unsustainably in the medium term. In our own base case projection, we have the government deficit moving back down toward 3.5 per cent of GNE by 1985 and toward 2.5 per cent of GNE by 1987.

The reason the government has so stressed deficit reduction in the past is its determination to control inflation. There are two important links between large deficits and inflation. One is expectational. Deficit reduction stands as a symbol of the government's commitment to combat inflation. The significance of psychological elements in the war against inflation cannot be overlooked. If the public is convinced that the government is applying a strong dose of fiscal restraint to bring inflation down, then its inflationary expectations will ebb and inflation, which is fed largely by expectations, will come down more readily. For this reason, it is important that the government carefully explain to the public the reasons for the larger deficit and reaffirm its continued commitment to fiscal restraint. The second link between deficits and inflation works through the degree of slack in the economy. High unemployment and excess capacity serve to encourage restraint in wage determination and price setting and thus curtail inflation.

Unemployment is currently running at almost 12 per cent. This is well above the 6.5 to 7 per cent rate of unemployment thought to be consistent with a stable rate of wage inflation. Capacity utilization in manufacturing as estimated by the Bank of Canada was 73 per cent in the first quarter of 1982, well below the long-term average of 90 per cent. More than enough slack currently exists in the economy to continue to exert downward pressure on inflation.

The break in commodity prices and the slowdown in food price inflation have had a favourable impact on inflationary expectations. Domestic energy price increases are also scheduled to slow down. The downturn in inflationary expectations should be reinforced by the growing slack in labour and product markets. In this climate, the risk of exacerbating inflationary expectations by accepting a larger deficit is minimized if the government effectively communicates the justification for its policies to the public.

The Case for a Moderate Dose of Fiscal Stimulus

Indeed, in recent months the balance of risk has shifted from worsening inflation to growing unemployment. A moderate additional injection of fiscal stimulus might be considered in order to restore the balance. The stress must be put on "moderate." A moderate dose of fiscal stimulus would be in the $2 billion range, which represents 0.5 per cent of GNP. It should be distinguished from a large dose, which would be more than $4 billion, and a massive dose of over $6 billion.

A massive dose of fiscal stimulus would clearly compromise the disinflationary stance of fiscal policy. Such an outcome would be disastrous for Canada because inflationary expectations are already running much higher than in the United States. It could trigger a severe outburst of inflationary expectations in Canada.

The risk in continuing to focus primarily on inflation during the current downturn is that patterns of expectation built up over the entire postwar period could be altered and the economy could remain sluggish. The dangers of such a strategy were demonstrated by the Thatcher government in the United Kingdom which, with its singlemindedly anti-inflationary approach to demand management policy, succeeded in generating a recession that became self-feeding. The unemployment rate has risen to almost 13.5 per cent, and 20 per cent of all manufacturing jobs have already disappeared. The Thatcher experiment should not be repeated in Canada. It is better to ease policy somewhat if unemployment begins to mount and to pursue a more gradualist approach to fighting inflation.

The case for additional fiscal stimulus is strengthened by the fact that unemployment insurance (UI) now plays a very limited role in promoting economic stabilization. Changes in UI financing arrangements introduced two years ago had the effect of transferring an important and volatile share of program costs from the government to the private sector. Prior to 1980, the government financed initial benefits and labour force extended benefits above a threshold unemployment rate based on an eight-year moving average of unemployment rates. These costs, along with expenses involved in administering the Employment Service, have been shifted to the private sector. The federal government retains financial responsibility only for regional extended benefits and benefits to self-employed fishermen. Employer and employee premium rates have been adjusted annually with a view to moving toward balance in the private sector's UI account. The high share of costs borne by the private sector and the emphasis given to maintaining balance in the account over a 2-3 year period have limited the size of the gap that may arise between premium revenue and benefit payments in any year. UI is thus not, in the aggregate, as able to cushion the declining disposable income resulting from higher unemployment. And much less reliance can be placed on UI to provide continued support for economic activity even in the face of persistent high unemployment.

Before proceeding with a discussion of the form that a moderate dose of stimulus might take and of some illustrative simulations with CANDIDE of its possible impact, some general points should be made. A moderate dose of fiscal stimulus of $1-2 billion by itself will not have an overwhelming impact on the economy. Fiscal stimulus amounting to only 0.5 per cent of GNP will not make the difference between recession and slow growth or between slow and rapid growth. It will raise real GNE by only about 1 per cent, and lower the unemployment rate by about half that amount.

What a moderate dose of fiscal stimulus can do, however, is give a signal to economic agents that the government still stands ready to stabilize the economy if necessary. If businessmen and consumers are confident of this, as they have been over most of the postwar period when governments have actively pursued stabilization policies, they will be willing to proceed with investment in plant, equipment and inventories, and the economy will be more likely to stabilize itself.

Estimates of the Impact of Various Types of Tax Cuts

The impact of administering different types of moderate doses of tax cut stimulus to the faltering economy can be illustrated using CANDIDE. Each of these tax cuts costs $1 billion. This is at the bottom of the range for a moderate dose of stimulus. They can be combined in various ways to yield up to a $2 billion tax cut package. While the exact magnitude of the economy's response to a tax cut cannot be predicted with any precision, there is little doubt that as long as there is sufficient slack in the economy, a tax cut can raise the level of economic activity and lower unemployment. This is the traditional Keynesian result and is generated by simulations with conventional macroeconometric models such as CANDIDE. Models differ more over the magnitude of the response and the disaggregated sectoral impacts of various types of tax cuts. Here we will sketch the main channels of influence and the major sources of uncertainty for each cut.

A cut in the personal income tax rate, reducing taxes by $1 billion (Table 5-2), would raise disposable income and thus stimulate consumer expenditures, particularly on high-priced durables such as cars and appliances, hard hit by high interest rates. Production would have to expand to meet the added demand, and output and employment would increase. A $1 billion personal income tax cut taking effect in 1983 would raise output growth by 0.2 per cent in 1983 and lower the unemployment rate by 0.1 per cent. By 1985 the tax cut would have exerted most of its stimulative effect on the economy and real output would be up by 0.3 per cent and the unemployment rate down by 0.2 per cent. These are not large effects, but they are in the right direction to provide additional support to the recovery.

Table 5-2

Projected Impact of a Personal Income Tax Cut on Selected Economic Indicators, Canada, 1983-87

	1983	1984	1985	1986	1987
			(Percentage change)		
GNE	0.2	0.2	0.3	0.3	0.3
GNE deflator	--	--	0.1	0.2	0.3
Consumer price index	--	0.1	0.2	0.3	0.4
			(Per cent)		
Unemployment rate	-0.1	-0.1	-0.2	-0.2	-0.3
			($ Millions)		
Current account balance	-366	-520	-806	-1,007	-1,251

Source Economic Council of Canada, CANDIDE 2.0 model, July 1982.

Any psychological impact a tax cut might have in restoring consumer and business confidence in renewed growth is not captured in the CANDIDE simulations. But just because it is not readily quantifiable does not make it any less important. Another source of uncertainty associated with personal income tax cuts concerns the extent to which the tax reduction is spent rather than saved. The CANDIDE simulation assumes that it is spent and saved in the same relative proportion as regular income. The marginal propensity to consume in the model is 0.71 after one year and 0.79 in the longer run. This means that 71 cents out of each $1 in tax cut is spent in the first year and 79 cents eventually. If more or less were spent, the impact of the tax cut on demand would be correspondingly greater or less. Also in CANDIDE, income tax cuts are not reflected in lower wage increases. To the extent that workers bargain for real after-tax wages, income tax reductions can induce wage restraint.

All or part of the stimulus could take the form of a corporate income tax cut. This would focus more directly on lagging business confidence and on providing some measure of relief from financial stringency. It would thus restore the business community's will to invest. Many types of corporate tax cuts could be considered. The corporate income tax rate could be lowered, capital consumption allowances could be accelerated, or the investment tax credit could be enriched. Alternatively, the tax reduction could be used to move the corporate tax system in the direction of one based on the taxation of real income and away from one that taxes illusory inflationary gains. In addition to promoting investment, such a move would have favourable allocative effects on the industrial and sectoral distribution of investment, and thus serve to enhance productivity.

The illustrative simulation reported here is for a $1 billion reduction in the corporate income tax effected by lowering the federal tax rate by 15 per cent (Table 5-3). This reduction would bolster corporate cash flow. It would also decrease the cost of capital, one of the key determinants of investment expenditures in the CANDIDE model. Business spending on plant and equipment would be encouraged. This is an important difference between personal and corporate income tax cuts. While both raise demand and thus output and employment, a corporate tax cut favours investment, and a personal tax cut consumption. Higher investment increases productivity and supply, and thereby exerts a helpful downward pressure on inflation.

Table 5-3

Projected Impact of a Corporate Income Tax Cut on Selected Economic Indicators, Canada, 1983-87

	1983	1984	1985	1986	1987
			(Percentage change)		
GNE	0.1	0.3	0.5	0.6	0.6
GNE deflator	-0.1	-0.3	-0.4	-0.4	-0.3
Consumer price index	-0.2	-0.2	-0.3	-0.3	-0.1
			(Per cent)		
Unemployment rate	--	-0.1	-0.2	-0.3	-0.3
			($ Millions)		
Current account balance	-214	-836	-1,210	-1,662	-2,025

Source Economic Council of Canada, CANDIDE 2.0 model, July 1982.

A reduction in corporate income tax rates costing $1 billion, starting in 1983, would increase real GNE by 0.1 per cent in 1983. By 1985 output would be 0.5 per cent higher and the unemployment rate 0.2 per cent lower. Capital stock would be 0.4 per cent greater in 1985 and productivity would be up by 0.3 per cent, reflecting the increased supply of capital inputs and the higher level of demand. The consumer price index would be reduced by 0.3 per cent in 1985. This is a modest additional benefit of a corporate income tax cut.

An indirect tax cut is another attractive way to administer a moderate additional dose of stimulus, either by itself or as part of a package of measures. A reduction in the general manufacturers' sales tax of $1 billion, if passed on to consumers, would stimulate consumption, particularly of durables and semidurables, which are more heavily taxed. Alternatively, the elimination of the tax on building materials, which yielded over $600 million in 1981-82, would promote investment expenditures on construction. Both these sectors have been hit hard by high interest rates and could benefit from a little stimulus.

An advantage of indirect tax cuts over direct tax cuts is that they directly lower prices and thus provide a disinflationary shock that reinforces government policy to counter inflation. This holds for a manufacturers' sales tax cut. Its impact on the consumer price index could lead to smaller wage increases.

The simulation we have performed is of a reduction in the general manufacturers' sales tax rate, commencing in 1983 (Table 5-4). It would increase real GNE by 0.2 per cent in 1983 and by almost 0.5 per cent by 1985, and it would decrease the unemployment rate by 0.2 per cent by 1985. The added disinflationary benefit would be a 0.9 per cent slowdown in inflation in 1983 and a price level 1.2 per cent lower in 1985. This would help in a small way to offset the direct impact of scheduled energy price increases on price levels.

Table 5-4

Projected Impact of a Manufacturers' Sales Tax Cut on Selected Economic Indicators, Canada, 1983-87

	1983	1984	1985	1986	1987
			(Percentage change)		
GNE	0.2	0.4	0.4	0.4	0.5
GNE deflator	-0.6	-0.9	-0.9	-1.0	-0.9
Consumer price index	-0.9	-1.1	-1.2	-1.2	-1.1
			(Per cent)		
Unemployment rate	--	-0.1	-0.2	-0.2	-0.3
			($ Millions)		
Current account balance	-313	-837	-690	-629	-763

SOURCE Economic Council of Canada, CANDIDE 2.0 model, July 1982.

All the simulations demonstrate that a modest injection of tax cut stimulus can be expected to have a relatively small positive impact on economic activity and employment. No promises of supply-side miracles can be made. More important, perhaps, than a tax cut's small beneficial impact on the economy is the signal it would give to Canadians that the government is committed to getting a recovery under way – if one does not develop strongly enough on its own as a result of the reversal of standard cyclical forces. A modest net tax cut at this time could help to restore the confidence of investors and consumers and spark a resurgence of spending. At the very least, it could prevent a further reentrenchment from delaying or severely weakening the recovery.

A modest net tax cut might serve as a spark plug for the private sector engine of recovery. A massive net tax cut would not only start the engine, but could set the economy off down the road to greater inflation. Ultimately, this might produce fewer rather than more jobs. This assertion cannot be demonstrated with an econometric model such as CANDIDE. In fact, the impact of fiscal stimulus is roughly directly proportional to its magnitude. Thus, if a little stimulus is good for output and employment, a lot is even better. But such models do not adequately capture the complex expectational forces that drive the economy. Indeed, there is this and much else that we do not understand about how the economy operates. Expectational impacts cannot be precisely modeled until our understanding improves. Nevertheless, it would be risky to ignore the expectational forces that could probably work fairly rapidly to undermine the short-run beneficial effects on output of an overly expansionary policy.

Incomes Policy

The high cost of combating inflation through a restrictive demand management policy and the persistence of inflation in the face of high unemployment have sparked a renewed interest in incomes policy. An attraction of incomes policy is that it can be used as a supplement to anti-inflationary fiscal and monetary policy in bringing inflation down more quickly and with lower cost in terms of lost output and unemployment. It would work by acting directly to restrain increases in wages and other incomes, rather than by relying on unemployment and excess capacity to foster restraint. It might also have a favourable disinflationary effect on expectations.

A precondition for any kind of incomes policy would be the availability of adequate information on compensation. Under the Anti-Inflation Program, employers were required by law to report to the Anti-Inflation Board (AIB) on total compensation by employee groups. These data were useful to both management and unions in gaining a better appreciation of the costs of overall compensation plans and their various elements. This was discontinued following the termination of the AIB, and no adequate substitute source of information has emerged. Also, if workers are to accept an incomes policy and abide by it, they must have assurances that firms are not taking advantage of wage restraint to build up profits, but are instead passing the savings on in lower prices. This would probably require a much greater degree of disclosure of corporate financial information than has so far been the case.

There are many different types of incomes policy. Some are voluntary, others mandatory. Some rely on rewards to encourage compliance, others on sanctions. Some are administered or monitored by formal agencies. Others are run in a very informal way.

Calls for restraint in pressing income demands constitute the most rudimentary form of incomes policy. This might involve general exhortations for belt tightening or it could take the form of jawboning to achieve specific outcomes in particular cases. If everyone cooperates, the resulting lower growth of prices and incomes will be to the advantage of all. This is the simple but powerful message that lies at the heart of all incomes policy.

The message can be made more explicit by promulgating guidelines for price and income increases and establishing agencies to monitor compliance. But as long as the incomes policy remains voluntary and not backed by sanctions, it may be difficult to get individuals and groups to sacrifice their own particular interest in higher incomes for the general good of lower inflation.

The Minister of Finance established an explicit incomes policy for Canada in his June 28, 1982 budget. This policy relies on voluntary compliance with a guideline buttressed by mandatory enforcement in the federal public sector. Specifically, the Minister took four actions. The first was to urge Canadians to lower their demands for income increases to 6 per cent during the 12 months ending July 1983 and to 5 per cent in the following 12-month period. The second action was to impose the same 6 and 5 per cent pay ceilings on the federal public sector, and affects more than 500,000 federal employees. The third action was to limit indexation of the personal income tax and major transfer payments to the same guideline. The fourth action was to ask those federal agencies that regulate the prices for such goods and services as transportation, public communications and foodstuffs to adhere to the objective of the government's strategy.

The federal government has consulted with the provinces in an effort to secure their cooperation in restraining public sector compensation and in implementing other restraint policies. Several provinces had already adopted compensation restraint programs of their own prior to the federal budget. The British Columbia government had introduced a Compensation Stabilization Program for the B.C. public sector, and the Newfoundland and Ontario governments set limits of 5 and 6 per cent respectively for salary increases of senior civil servants. The Quebec government has given notice that it will seek a wage rollback effective January 1, 1983. Quebec civil servants, teachers and hospital workers are estimated to earn 10 to 20 per cent more than comparable employees in the private sector. Following the budget, Nova Scotia set a 6 per cent cap on salaried civil servants, to drop to 5 per cent in 1983, New Brunswick adopted its own public sector compensation restraint program along the lines of the federal program, and British Columbia tightened up its existing program to correspond more closely to that of the federal government.

Mandatory public sector wage guidelines in the United States have had a major impact on federal government wage increases there. The Reagan Administration's firm 4.8 per cent guideline has probably contributed to the wage slowdown in that country. With the Administration's tough treatment of the air traffic controllers, its determination to stick to the guideline in the face of illegal strikes was convincingly established.

At this point it is still an open question whether the federal government's strategy will be sufficient to bring inflation down as quickly as desired. Private sector wages may not slow down as much as required. At the same time, other elements such as food and energy prices could take off unexpectedly, and a depreciation of the dollar cannot be ruled out. This could raise import prices by more than currently anticipated.

It might be useful to review two other incomes policy options – wage and price controls, and a tax-based incomes policy (TIP). These options do not rely as heavily on voluntary cooperation as does the government's present strategy and can thus be viewed as ways of strengthening anti-inflationary policy still further.

Wage and Price Controls

A good place to start a discussion of wage and price controls is with an examination of our own Anti-Inflation Program. Canada's experience under this program from October 1975 to 1978 demonstrated that over a number of years controls can bring wage inflation down appreciably.

Under the influence of controls, the first-year increase in major settlements declined from almost 20 per cent in 1975 to 7 per cent in 1978. The decline was too closely related to the wage guideline to be dismissed as a coincidence; econometric studies also confirmed the program's effect.[17]

The Anti-Inflation Program did not have a similar degree of success with price inflation. The consumer price index slowed down only from just under 11 per cent in 1975 to 9 per cent in 1978. This was more than twice the 4 per cent target announced in the *Attack on Inflation* white paper that launched the Anti-Inflation Program. The price objectives of the program were not attained, not because of any failure to control domestic wages, but because of increases in prices that were necessarily outside the control of the program. These included farm gate food and import prices. The depreciation of the Canadian dollar between 1976 and 1978 was important. The slowdown in productivity growth also contributed by preventing the deceleration in wages from being fully translated into unit labour costs.

The failure of the Anti-Inflation Program to deliver the promised improvement in inflation has left a legacy of skepticism concerning the efficacy of controls. It confirmed labour's suspicion that controls are for wages, not prices; thus the labour movement is now more opposed to controls than ever. This opposition extends to other forms of incomes policy as well. Nevertheless, controls are remarkably popular with the public at large, as evidenced by opinion polls on the question.

Events notwithstanding, the design of the Anti-Inflation Program was fundamentally sound. Total compensation and profit margins are the most appropriate points for a program to try to exercise restraint over incomes and prices. Widespread exceptions for farm gate food, imports, energy and smaller firms are necessary. A strategy to lower inflation over a number of years is realistic and, if all goes well, attainable.

Direct price control has been favoured over profit margin control by some, including notably Jack Biddell, a former member of the Anti-Inflation Board. The drawback of profit margin controls is that they undermine the incentive structure: it is not as advantageous to undertake productivity-raising investment because it results in lower prices but does not necessarily add to profits. Furthermore, a failure to control costs can perversely permit higher profits.

It is argued that direct price controls do not create such undesirable disincentives. But price controls have drawbacks of their own that are even more serious. Since productivity growth differs greatly among industries, it is impossible to establish a single economywide price guideline. Thus price guidelines must be set separately for each industry. To the extent that they turn out to be inappropriate, relative prices can be distorted by much more than would be the case with profit margin controls, and severe distortions and misallocations of resources can develop. Profit margin controls are preferable to direct price controls because they allow relative price adjustments in response to variations in cost. Only adjustments resulting from variations in demand are impeded. Also, the negative incentive effects of profit margin controls are less likely to be significant with temporary controls. Firms will continue to invest and control costs because they know they will have to compete once controls are withdrawn.

A wage and price freeze has been suggested as the best way to bring inflation quickly to heel. It would administer a much more abrupt shock to inflationary expectations than a multi-year program of more gradual restraint such as the Anti-Inflation Program. But to impose a freeze on wages and particularly prices with inflation at current levels would risk causing severe allocative disruptions such as shortages and surpluses for certain goods and in some sectors.

These are much less likely to arise with controls programs structured along the lines of the Anti-Inflation Program. The exemption of particular sectors and the application of margin controls prevent prices from getting too far out of line with costs. On the other hand, a freeze of short duration would minimize the impact of distortions. If imposed over a number of years, there is a danger that controls could hamper necessary ongoing structural adjustments. (Some of these were noted in the discussion in Chapters 3 and 4 of investment, the balance of payments, and economic development policies.)

Controls are by their nature a very dull instrument of policy. To be effective they must impose wage guidelines that are significantly below the wage increases that would result in their absence. With unemployment as high as it is and exerting substantial downward pressure on wage settlements, a guideline would have to be much lower than the rate of inflation to exercise more restraint than the market.

On the other hand, if wage increases continue to spiral upward in spite of very high unemployment, controls may be necessary to defend our competitive position and protect jobs in our export and import competing industries. Unemployment is already too high to be allowed to rise further. A runaway inflation could not be tolerated. Its impact on our social fabric would be too devastating. Combating it with a more restrictive demand management policy alone would be too costly. Controls would be the only way out of an impasse – a last resort. Fortunately events are not likely to evolve in this way.

Alternatively, controls could be used to hold down inflation, while a massive dose of fiscal and monetary stimulus is applied to send the economy booming ahead and unemployment plummeting. Such a strategy would be unlikely to work except in the short run. Once controls were withdrawn, inflation would burst forth.

A Tax-Based Incomes Policy

The other type of incomes policy, not as drastic as controls but not requiring as much cooperation as a voluntary incomes policy, is a tax-based incomes policy (TIP). A TIP would use the tax system to create an incentive for wage restraint. It would do this either by rewarding wage increases below a guideline with tax cuts or by penalizing wage increases above a guideline with a tax increase. A TIP could be focused on employers or employees. Administration could be through the corporate or personal income tax.

In the past, the Minister of Finance has publicly expressed interest in a TIP. Evidently, in preparing the November 12, 1981 budget he was unable to find a TIP that in his judgment would be administratively feasible and that would make a sufficient contribution to lowering inflation to be worthwhile.

There are many problems with TIPS. The measurement of wage increases is one of the most basic. The AIB developed a comprehensive system to do the job, which could be integrated into the tax system. However, the tax system is already overburdened. There are limits to how far it can be pushed without undermining the principle of self-assessment on which it is based. Also, if a TIP were in effect for any length of time it could result in widely varying tax rates among corporations or individuals, depending on the nature of the TIP. In the case of corporations, it could create false signals about where to invest to get the best after-tax rate of return and thus result in a misallocation of investment. For individuals, it could result in a tax system in conflict with widely held views on horizontal and vertical equity.

There are also questions about the revenue implications of TIP. With a wage bill of $185 billion in 1981, a reward TIP would have to offer a very costly tax cut if it were to provide an adequate incentive to restrain wage demands. Such an expensive TIP tax cut might not be consistent with fiscal restraint. On the other hand, a penalty TIP could withdraw large sums from the economy, which might lower demand and raise unemployment.

Finally, there are doubts about how effective a TIP could be. Would the public abide by a TIP that provided little or no increase in real wages? Would workers forgo permanent increases in wages for temporary tax reductions? Would corporations be induced to resist wage increases more strongly by the threat of a partial temporary tax increase than by the prospects of having to pay the higher wages indefinitely? Would corporations be able to pass on TIP tax increases in higher prices?

These are a few of the more important questions concerning TIP. There are others. Until the proponents of TIPS provide convincing answers, there are strong grounds for being skeptical about the contribution that any form of TIP might make to bringing down inflation.

6 Conclusions and Recommendations

Now is the most difficult time to make policy recommendations since the war. Inflation is high and is coming down only gradually. The unemployment rate has set a post-Depression record and is expected to remain stuck at a very high level. Even with the June budget measures, the government deficit is projected to continue at high rates. Interest rates are high. The financial position of both primary and secondary industry and of much of the commercial service sector has deteriorated severely. The resilience of Canada's financial system is under test. The favourable views for Canada's medium-term prospects have been discounted or thrust to farther horizons. Admittedly there are some positive signs too – the high savings rate, the strength of some exports. But the negative signs are so widespread that the strength and duration of the recovery are both at risk.

We have to face short-term realities, but at the same time we must maintain a sound medium- and long-term perspective. Stabilization policy must be directed to facilitating the recovery in output and employment, and to gearing down the rate of inflation. Since there are long lags in the impact of policy on the economy, it is necessary to act now if we are serious about restoring satisfactory economic performance in the medium and long term. This will not result in a big improvement immediately, but it will at least point the economy in the right direction.

An incomes policy may provide a useful supplement to general economic policy by speeding up the transition from a high inflation/high unemployment economy to a lower inflation/lower unemployment one. But it cannot create the fundamental conditions for maintenance of such a result, nor can it deal with structural problems of growth, unemployment, or weakness in financial or other institutions.

General economic policy directed to macroeconomic goals is not sufficient for our times. Even if inflation and unemployment were both lower and there were justified confidence that this would continue, Canada would still face many problems in improving its productivity, its employment growth, its efficient use of skills and plant and equipment, its effective participation in an internationally competitive environment, and its capacity to cope with change and instability. To make progress on all these fronts, the status quo will have to be disturbed. This will create losers as well as winners. Time and resources are needed to work out the sharing of the adjustment costs and benefits. Structural adjustment processes cannot be turned on and off like a tap. They are often the sum of many small changes rather than a few big ones. Persistence and patience are required to produce good results. Nevertheless, structural adjustments should not be pushed aside, even when the macroeconomic issues of inflation and unemployment are placed front and centre.

Policies to Combat Inflation and Unemployment

The general thrust of Canadian economic policies has become more and more restrictive over the last few years. To a continued restrictive monetary policy, the provincial and federal budgets of the first half of 1982 added another restrictive turn to the fiscal screw. Yet inflation continues high; unemployment is at a postwar record; and government deficits, as usually measured, are high. At some time the restrictiveness of Canadian economic policies should be reduced. When? In what form? To what degree? What are the conditions conducive to best results from the easing off when it takes effect? We do know there are both long lags and complex expectational forces at work; it follows that if we want results a year or more from now, action may have to be taken soon.

Federal Government Restraint Program

In recent months significant progress has been made in bringing inflation down, but it still remains a serious problem. Rates of wage and price increases are currently well above those in the United States. The government took four specific actions in the June 28, 1982 budget as part of a concerted strategy to bring down inflation by encouraging wage and price restraint. These were: the establishment of voluntary wage guidelines of 6 and 5 per cent over the next two years; mandatory observance of the guidelines in the federal public sector; a limitation on the indexation of taxes and transfers to the same guidelines; and an instruction to federal regulatory agencies to adhere to the objectives enunciated in the guidelines. As the details of the program became available over the course of the summer, the strength of the federal government's commitment to achieve a large and relatively rapid deceleration of inflation has become much clearer, as has the government's intention to rely on the extensive use of leverage to attain this objective.

The Broad Anti-Inflationary Thrust of Monetary and Fiscal Policy

The Council shares the government's view that the problem of inflation must be addressed. Its adverse effect on production and investment and on the distribution of income and wealth cannot be ignored. Furthermore, inflation could very well undermine the economy's medium-term growth prospects if not resisted, thus adding to the ranks of the jobless. While it is costly to combat inflation now, it would be even more costly not to do so. It is inevitable that at some point it will become absolutely essential to prevent an acceleration of inflation. If it gets too far out of control before that point is reached, the required tightening of policy could be so drastic that the cost in terms of lost output and unemployment would be even more staggering. Consequently,

1 **We recommend that for monetary and fiscal policy, the federal government continue to pursue the broad lines of its gradual but firm medium-term anti-inflationary stance. Government expenditures in the medium term should be restrained so that their trend growth will be less than the trend of GNP. The federal government deficit should be reduced in the medium term as the economy recovers from the recession to more normal levels of activity. The Bank of Canada should continue to exercise firm control over the rate of growth of the money supply.**

While we recognize that an overall restrictive stance for fiscal and monetary policy is necessary to bring down inflation, we believe that the time has come to consider whether, given the severity of the current recession and the uncertain prospects for a recovery, it would be desirable to reduce somewhat the degree of restraint.

Unemployment and Real Growth

The current recession is turning out to be much more severe than anticipated. The unemployment rate is almost 12 per cent, its highest level in the postwar period. The recovery is not expected to be strong enough to bring it down to more acceptable levels. Indeed, there is even a danger that the confidence of businessmen and consumers may be so shaken by the willingness of the government to accept slack and high unemployment that they will cut back on their spending, causing the recovery to falter. Expectations of continued real growth built up over the entire postwar period have contributed much to economic stability. It is important that these expectations be maintained and that businessmen and consumers look over the valley of the current recession in making their investment and spending plans. The government should provide the public with an indication that it is still committed to stabilizing real activity in the medium term and that it is not going to pursue restrictive policies regardless of their costs in lost output and employment. Therefore,

2 **We recommend that the federal government introduce a moderate dose of fiscal stimulus in its upcoming budget.**

A moderate dose of fiscal stimulus would be around $2 billion per year and would not compromise the medium-term anti-inflationary stance of fiscal policy. Preference should be given to a package of tax cuts, rather than additional spending. The package should take into consideration the influence of various elements on inflation, employment and investment, and in particular should take account of the government's restraint program. The relative proportion among the various possible cuts in the $2 billion package and the exact form they might take should be a subject of public pre-budget consultation.

There are pros and cons to each possible element in the package. A cut in the manufacturers' sales tax would be attractive because of the boost it would give to lagging sales of durable goods and because of its direct price reducing impact if passed on to consumers. There is a limit to how far it would be desirable to reduce this tax, however, because of its relatively narrow base (which excludes most food and clothing). And unless the proposed shift in the point of impact to the wholesale level had been made, it would be difficult to identify and measure the extent to which cuts in the manufacturers' sales tax were passed on to final purchasers. Provincial indirect taxes have increased substantially in the last couple of years, and the chances of further such increases to offset any decreases by the federal government should also be considered.

Under some circumstances, a corporate tax cut would be a useful part of a package of fiscal stimulus because of the positive effect it would have on after-tax rates of return. It could help to alleviate the current corporate liquidity squeeze and improve business confidence. This could raise investment and thus supply, and exert mild downward pressure on inflation. Moreover, it could be structured in such a way as to facilitate a reform in corporate taxation aimed at ensuring that taxes are based on real rather than nominal profits, as is proposed in Recommendation 13 below. However, under present circumstances the responsiveness of investment to corporate tax cuts may not be large.

A personal income tax cut would be helpful in raising consumption more generally and promoting recovery. Unless consumers can be induced to loosen their purse strings, a substantial recovery is unlikely to get under way. It is only after the recovery has been established that investment can be expected to pick up. However, the principal factors in a recovery of consumer expenditure appear to be lower interest rates and a restoration of consumer confidence, rather than a lack of disposable income. In addition, the design of an equitable reduction in personal income taxes may be especially difficult in the period ahead, in view of the incomplete state of legislation on the changes in personal taxation from the last two budgets and the complications that arise from the incomes and prices policy.

Part of the fiscal resources might be best used in a program to moderate the prospective large increases in employer and employee unemployment insurance contributions in the period ahead, a matter to which we now turn.

Unemployment Insurance

Large increases in employer and employee unemployment insurance contributions could take place as early as January 1, 1983 if the government were to move aggressively in an effort to balance the account through rate action. Under the Unemployment Insurance Act the government is required to set rates to move the account toward balance. But the government has some degree of discretion about the pace at which balance is approached.

Unemployment insurance has traditionally functioned as an automatic stabilizer. When unemployment rose, unemployment insurance replaced part of the lost income of the unemployed and thus sustained demand in the economy. However, revisions to the Unemployment Insurance Act that took effect in 1980 substantially reduced the role of unemployment insurance as an automatic stabilizer by shifting the financing of initial regular benefits and extended labour benefits entirely to premium contributions. Following these revisions, unemployment insurance functions only temporarily as an automatic stabilizer. If unemployment goes up and remains high, unemployment insurance will provide income support only in the interval before contributions are raised to finance the benefits. Eventually contributions will have to be raised by even more than is necessary to finance benefits in order to reduce the cumulative deficit of the unemployment insurance account. Since increases in employee contributions decrease disposable income and dampen demand, and increases in employer contributions raise business costs, increases in contribution rates can at the same time raise both inflation and unemployment. The larger the increases the greater the impact.

In 1982 weekly employee premiums are set at $1.65 per $100 of insurable earnings, with maximum insurable earnings set at $350 per week. Premiums are allowed as a personal income tax deduction. Employer contributions are 1.4 times employee premiums. Because of this premium structure, contributions fall disproportionately on lower income earners. Thus large increases could be viewed as inequitable.

In view of our present difficult economic circumstances,

3 **We recommend that the government take steps to limit the extent of any increases in unemployment insurance contributions by employers and employees in the coming year.**

This could be accomplished by stretching out the period of time over which the rate increases would be phased in so that they would be imposed only as the economy strengthens. The government could also take legislative action to fund part of the deficit of the unemployment insurance account out of general revenues, thus obviating the need for such a large increase. The government could draw on some of the resources we earmarked above for tax cuts.

Government Spending

An important part of a medium-term strategy to combat inflation is to restrain government spending. The pressures toward growth of government spending are relentless. Yet the more governments do, the more they are expected to do. The growth of expenditure leads either to increased deficits or to increased taxes, both of which have inflationary implications.

Many rather glib suggestions have been made about cutting government expenditure. Yet we must realize that to restrain the growth of government spending will not be an easy task. Little can be done directly, of course, about debt service payments in the short to medium term. Moreover, a wide range of government expenditures – especially human resource programs like health, education and social assistance – are closely related to both the growth and age composition of the population. With the rather rapid expansion in the older age groups that is already under way in Canada, strong upward pressure on health and retirement income expenditures can be expected for many years ahead, even if there were to be no improvement in present levels of service or benefits. And although the much slower growth in the younger age groups may provide some offset, particularly in education expenditures, the demands of rapid technological change will lead to increasing emphasis on adult education and training programs. In the short run, as long as interest rates and unemployment remain high, there will be pressure to provide more relief to various groups and sectors. Proposed reductions in programs must not fall mainly on the income groups least able to bear them.

In evaluating the government's record on spending restraint, it is important to distinguish between spending on public debt charges and other spending. Public debt charges depend on the level of interest rates and on public debt outstanding. In the short term, interest rates can be very volatile, with sharp rises leading to large increases in public debt charges. This has contributed to an increase in government spending which is more rapid than GNP and an increase in the government share of GNP. Such an increase should not, however, be viewed as inconsistent with the government's commitment to restrain the trend growth of its spending to less than the trend of GNP. It would not make much sense to try to avoid the increase in the government share by cutting back on other spending programs. The increase in public debt charges will be curtailed automatically when interest rates decline to more normal levels.

Many of this country's human resource programs were established under conditions of remarkably rapid growth. We reiterate the point made in previous Annual Reviews that the "fiscal dividend" provided by such growth is needed to maintain these programs, and we would hope to improve them eventually, where necessary. Nevertheless, even in the high priority areas of economic development and energy, new spending should be financed out of the policy reserves already allocated to the envelope or out of savings on existing programs. In the area of energy, massive policy reserves were created for new initiatives under the National Energy Program. It is difficult to see how the government could manage to spend the large sums allotted as quickly as planned in a cost-effective manner. Consequently,

4 We urge that new energy initiatives be subject to the same critical scrutiny as other new spending programs proposed in envelopes less well endowed with policy reserves.

The federal government demonstrated the strength of its commitment to expenditure restraint in the June 28, 1982 budget. While the budget contained new spending initiatives on direct employment creation, economic development, housing, and interest relief for small business and farmers, the increased spending was outweighed by expenditure reductions resulting from public sector wage controls, limitations on the degree of indexation for transfer payments, and other measures. Thus federal government spending has actually been reduced. The reduction in the government deficit will become much more pronounced in the medium term because the spending initiatives are temporary, whereas the cuts are continuing. Provincial governments have also been exercising relatively tight control over spending.

The Federal Deficit

While we view the $19.6 billion deficit expected for this (1982/83) fiscal year as worrisome, we believe it is entirely understandable and manageable in the current circumstances. The large deficit results primarily from the depressing effect of the recession on government revenues, from the impact of high interest rates on public debt charges, and from oil and gas revenues falling below expectations. The sensitivity of government revenues to economic activity is an automatic stabilizer that has the important function of dampening cyclical downturns. In a period of recession it is the government's responsibility to run large deficits in order to maintain economic activity and employment and to absorb private savings that would otherwise exert additional downward pressure on output. In so doing, the government does not crowd out private sector spending. Private sector savings are currently high enough to enable the government to finance its deficit without significant upward pressure on interest rates. There should be no problem in financing the deficit, large as it is. The funds are available. We stress that the increase in the deficit must be accepted. If instead the government were to try to avoid the increase through tax hikes, the recession would be worsened and the recovery delayed. The government should not be expected to meet its objective of deficit reduction during a recession. As a result,

5 We recommend that the federal government not take further actions to reduce the deficit until the economic situation improves and that in the meantime it accept, at the very least, the

increase in the deficit resulting from automatic stabilizers.

The deficit must nonetheless remain a source of concern. Once the economy recovers, substantial investment will be needed. Economic development in Canada is likely to be a very capital intensive process. It will require continued high savings by the private sector, and governments will have to reduce their deficits to make a greater proportion of these savings available to finance private sector investment.

Energy Revenues and the Deficit

The federal government was counting on rapidly growing energy revenues resulting from the National Energy Program and provincial agreements to enable it to meet its medium-term target for deficit reduction as well as to finance part of the National Energy Program itself. But, at least in the short run, lower than anticipated international oil prices will depress energy revenues and prevent the desired degree of deficit reduction.

Energy revenues, depending as they do on the international price of oil, are inherently much more volatile than other sources of government revenue. The international price of oil is subject to wide fluctuations related to changes in the balance between supply and demand in world crude markets. It is especially vulnerable to the forces of recession on the downside and political upheaval on the upside. If the government is going to be dependent on a revenue source as variable as energy revenues, it will probably have to accept much wider fluctuations in the deficit than would otherwise be the case. The alternative would be to try to counter the changes in energy revenues with offsetting changes in other revenues, which could very well prove to be destabilizing. Large tax increases to make up for lost energy revenues could worsen or prolong the recession.

Lower international oil prices raise important questions for both energy policy and fiscal policy. If lower international oil prices are a temporary phenomenon likely to be reversed in the future, then it would make sense to continue with the scheduled wellhead oil price increases in spite of the cap set at 75 per cent of international prices. This would ensure that, if the international oil price got back on the 2 per cent real growth track assumed under the National Energy Program, it would not be necessary to raise domestic oil prices more rapidly to restore the 75 per cent relationship judged to be appropriate. We recognize that higher energy prices may have a short-term effect of decreasing demand for other goods and services in Canada, but those effects can be taken into account in the fiscal stance. We recognize also the effects of increasing inflation in the short run. By steadily increasing the price of oil at the wellhead during the current period of soft markets, thus avoiding the necessity of large and destabilizing increases in the future, the costs to the economy of adjusting to higher energy prices would be minimized in the longer run.

On the other hand, should the international price of oil not recover, remaining lower for the balance of the decade, then the fundamental premise of rising real oil prices underlying the National Energy Program would have to be reconsidered. For the present, it is still possible to treat the current situation of weak international oil prices as a short-term deviation from a rising real trend. But the longer the situation persists, the more necessary a reappraisal of energy policy will become.

In the meantime, a case could be made for sticking with the originally announced schedule of oil price increases. Inevitably, there is never a good time to adjust to higher international oil prices. This adjustment has been postponed in the past and the gap between domestic and international oil prices has widened. A repeat of this would not be desirable. Continuing with the scheduled price increases would limit the increase in the federal deficit resulting from lower international oil prices. More important, it would allow the economy to adjust gradually but steadily to international oil prices that are higher than domestic prices. A good case could even be made in the longer run for increasing the domestic wellhead price of oil above 75 per cent of the international price. This would certainly encourage conservation and help reduce the efficiency loss caused by holding domestic prices below world levels. Furthermore, it may not be necessary to maintain such a wide energy cost advantage in favour of domestic industry. In view of the above,

6 **We urge the federal government and the governments of the oil producing provinces to address specifically, at an early date, the implications of lower international oil prices for domestic wellhead oil prices resulting from the 75 per cent cap.**

Monetary Policy

The Bank of Canada should continue to pursue its anti-inflationary approach to monetary policy of establishing money supply growth targets. Targets can have an important impact on inflationary expectations, one of the key driving forces behind the current bout of inflation. Targets signal to economic agents the Bank of Canada's resolve not to accommodate inflation. This encourages business and labour to exercise restraint in wage and price setting.

However, innovations in banking practices have been occurring that have made M1 (the sum of currency and demand deposits, on which the Bank has been targeting) a less reliable indicator of monetary trends than it was when it was selected as the monetary aggregate for which the target growth would be specified. In particular, the introduction of daily interest savings accounts and the spread of cash management to small and medium-sized businesses have significantly reduced the public's demand for M1. Accordingly, the recent slow growth registered by M1 has exaggerated the tightness of monetary policy. Moreover, the introduction of daily interest chequing accounts has also reduced demand for M1 as defined by the Bank of Canada. If all banks introduce daily interest chequing accounts paying competitive interest rates and if such accounts become popular with the public, a large and growing proportion of transactions balances might in future be held in other than demand deposits and therefore not be included in M1 as currently defined. In these circumstances, the Bank would have to reassess its strategy for controlling the growth of money supply. One option would be to broaden its monetary control total to include all chequable deposits. The difficulty with this option is in predicting and controlling a transactions balance on which interest is paid through control procedures based on interest rates.

In establishing and revising monetary growth targets and in manipulating short-term interest rates to achieve them, the Bank of Canada should carefully consider the implied level of real interest rates (the nominal interest rate minus the rate of inflation). Indeed,

7 **We recommend that the Bank of Canada put more explicit reliance on real short-term interest rates as a supplementary indicator of the stance of monetary policy.**

More explicit reliance on real interest rates as a guide for monetary policy would assist the Bank in pursuing an appropriate monetary policy in the face of shifts in money demand caused by financial market innovation. There are indications that the Bank has already shaded its policy in this direction, but a further shift and a more explicit statement of change would be welcome. Such a policy should be tight enough to be firmly anti-inflationary but not so tight as to be unduly restrictive. Negative real interest rates would be a signal that the target money supply growth range was too loose. Too high or increasing real interest rates would be an indication that the target money supply growth range was too tight. Real interest rates should be significantly positive, but not necessarily as high as they have been recently.

Indeed, real interest rates are currently higher than is necessary to combat inflation if they are combined with other anti-inflationary measures. There is much more slack in the economy now than is needed to exert significant continuing downward pressure on inflation. Moreover, interest-sensitive expenditures on housing, consumer durables and business investment are being unduly depressed by high real interest rates, thus impeding the recovery. High real interest rates and depressed economic conditions have undermined profitability and severely weakened corporate balance sheets. There is thus a risk that high real interest rates could lead to greater than anticipated cutbacks in investment spending on plant and equipment, further jeopardizing the recovery. This is unacceptable. The rate of unemployment is already too high. Consequently,

8 **We recommend, insofar as it is consistent with combating inflation and as international circumstances permit, that the Bank of Canada endeavour to bring current real interest rates down to more normal levels and that interest rates be allowed to decline with inflation in the medium term.**

There is enough room within current money supply growth targets for some lowering of real interest rates. In the medium term, institutional change tending to reduce the demand for money could facilitate the decline in nominal interest rates in step with inflation. However, it might be necessary at some point to adjust the target money supply growth range upward in order to allow real interest rates to come down to more appropriate levels or to facilitate the reduction in nominal interest rates during the transition period to lower inflation. It is important for the public to understand that reductions in nominal interest rates in step with inflation will increase the demand for money and that it is not necessarily inflationary to accommodate this increase in demand.

Capital Flows and the Exchange Rate

While greater Canadian ownership of the oil and gas industry is a desirable and indeed popular objective for policy, there can be no doubt that the wave of takeovers of foreign-owned oil companies encouraged by the government's policy of Canadianization had a disruptive effect on the Canadian dollar, interest rates and the economy in general, particularly as it came at a time of already high U.S. interest rates. In the Eighteenth Annual Review we noted that it might be wise to lengthen the period of time allowed for the Canadian ownership of oil and gas resources to reach the established targets in order to lessen the pressure on the Canadian dollar. We also observed that the Canadianization program might require adjustments in the management of this country's internal and external debt.

More recently, as international energy prices have weakened and interest rates have been at high levels, the pace of Canadianization through takeovers has come to a virtual halt. Nevertheless, it could pick up again if international oil prices rise or interest rates drop. This could pose a significant burden on a weakened economy. We think it is important to recognize that Canadianization of the oil and gas industry, although worthwhile as an objective in its own right, is not without its costs. Therefore,

9 We recommend care in proceeding with Canadianization so that it does not become a source of instability for the economy.

Incomes Policy

In the June 1982 budget, the government announced a program of mandatory 6 and 5 per cent wage guidelines for the federal public sector and accompanied this with a call for comparable voluntary restraint in the private sector. Following the budget, meetings were held with the provinces to coordinate government wage restraint and other policies.

The emphasis in the government's strategy is on restraining public sector wages, though there are also some restraints on administered prices. This emphasis on wages is not because the government believes that federal employees are responsible for inflation, but rather because the government wishes to encourage greater wage restraint in general. Indeed, if the private sector respects the same guidelines as are being imposed on public servants, then it should be possible to bring inflation down more quickly and at a lower cost in lost output and employment. To this end the government has consulted with business and labour and has demonstrated a readiness to bring selective sanctions to bear to encourage compliance.

We are concerned about some of the specifics of the restraint program. Overriding increases in existing federal contracts with the 6/5 per cent guidelines violates a fundamental principle of collective bargaining. The rigid application of the 6/5 per cent wage guideline could create some inequities and distort relative wages by not taking into account the timing and pattern of past increases for the groups affected as well as for related groups. There is also the question of the appropriate relative increases for low- and high-paid workers. In addition, we are concerned about the price side of the program. There is a temptation to go beyond limiting prices to cost pass-through and some restoration of historical profit margins and to try to restrain prices subject to government influence to the guideline. Since productivity growth and demand pressures vary significantly across industries and since all sectors are not equally susceptible to government influence, this could lead to allocative distortions and set the stage for catch-up price increases once the restraint program is terminated.

In endeavouring to get private sector support to curtail wage demands and lower inflation, the government is seeking to strengthen the economic forces already working in this direction. Private sector wages are already coming under increasing pressure from high unemployment and depressed profits. In some cases, workers have begun to accept pay cuts voluntarily. Thus there is a very good chance that wage inflation will abate significantly.

We think it is important that everyone understand the basic message underlying the government's strategy. It is that inflation will slow down only if everyone exercises restraint in pressing their income claims. Furthermore, if restraint is practiced all around, then real income losses can be minimized.

The need for restraint in Canada is accentuated by the slowdown in wage and price inflation in the United States. There is cause for concern that our competitive position could deteriorate without further declines in the external value of the Canadian dollar. In many of our export and import competing industries, jobs can be protected only by exercising restraint. There is also a danger that the persistence of high inflation could force the government to adopt more restrictive fiscal and monetary policies, which could drive unemployment even higher. Accordingly,

10 We recommend that provincial governments, business and labour cooperate fully with the government in seeking to bring down inflation.

The government's strategy is ambitious, but is backed by restrictive monetary and fiscal policy. We hope that all goes well and it is successful, although we realize that many things could go wrong. Compliance with the wage guidelines might not be widespread enough beyond the sectors subject to mandatory compliance. However, the government appears to be willing to use all the leverage at its disposal to ensure compliance. This includes attaching conditions to grants, subsidies, loans and guarantees. Inflation could also fail to yield to the restraint program if the prices of food and imported goods, which are not encompassed in the strategy, rose rapidly enough to keep inflation up. Even mandatory controls can be made to look unsuccessful by such developments. Consequently, it is best not to form exaggerated expectations of what can reasonably be accomplished. If inflation fails to yield to the current strategy, the government will come under pressure to take tougher action.

Wage and price controls are the obvious alternative – if the provinces are prepared to support them. As administered by the Anti-Inflation Board, they were successful in bringing down inflation despite a substantial depreciation of the Canadian dollar. It was widely recognized that the AIB limited wage increases. There was less agreement about its impact on prices. Many were skeptical. In assessing controls as an option it is important to realize that they entail very high economic and social costs. They supplant collective bargaining, an institution that is central to labour/management relations in our country. They also represent a heavy handed intervention by governments in the management of private sector business enterprises. A return to controls at this point must be viewed with concern by anyone fearing a permanently controlled economy with all of its implications for society. Controls hamper markets in performing their essential function of resource allocation. They thus impede the underlying process of adjustment under way in the economy and lead to a misallocation of resources.

Controls could also be very divisive. Income distribution could increasingly come to the fore as an issue. Conflicts among the federal government, labour and business could become very bitter. Therefore,

11 **We recommend that controls be used only as a last resort if wage inflation were to spiral dangerously upward.**

A tax-based incomes policy (TIP), which rewards wage restraint or penalizes greater than targeted wage increases, is another option that could help to limit wage increases. But there are too many doubts about its administration and effectiveness to warrant recommending it.

The Budgetary Process

The Council has long been interested in improving the budgetary process and providing the public with more information on fiscal policy. In its Sixteenth Annual Review the Council supported the government's decision to adopt the main lines of the Lambert Commission's recommendations for the presentation to Parliament and the public of a medium-term fiscal plan containing the government's planned expenditures, projected revenues, and the resulting deficit. Since the Sixteenth Annual Review was published the government has implemented a Policy and Expenditure Management System (PEMS). We welcome this initiative and commend the government for the increased information it is making available to the public on the medium-term economic and fiscal outlook and on spending plans.

Progress has been made toward greater openness in economic and fiscal policy formulation. More progress is required. The need for greater openness and more consultation was underscored by the events surrounding the November 12, 1981 budget. The Minister of Finance released a discussion paper, *The Budget Process*, in April. He drew heavily on two Canadian Tax Foundation reports in preparing his own discussion paper. The Minister concluded that the budget process needed to be improved and that the tradition of budgetary secrecy had to be redefined so that nongovernmental consultative groups could be used in budget preparation. He also noted that the budgetary and legislative processes could be improved through greater reliance on existing mechanisms such as discussion papers, draft legislation, the introduction of technical explanations for amending legislation and a thorough consideration of budget measures in Parliament.

In the June 28, 1982 budget the Minister of Finance announced the establishment of a committee to examine proposals made in a consultative document to reduce the taxation of investment income and to lower interest rates to selective borrowers. He also tabled a comprehensive Notice of Ways and Means Motions containing the draft legislation for the November 1981 budget tax measures. This was to give those affected a chance to review the bill before it was finalized. Both these actions are along the lines of those suggested in the discussion paper on the budget process.

The focus of the recent debate has been on the tax legislative process. Our own concerns are broader and extend to the process of formulating overall economic and fiscal policy. As a result of PEMS, the government has been providing much more information on its economic and fiscal policies. But this information is available only after the budget. What is required is much more information and more public debate before the government finalizes its policies and unveils them on budget night. Consequently,

12 **We recommend that the government initiate a more formal process of public pre-budget consultations on the broad fiscal strategy and specific tax changes under consideration.**

The government might launch such a process by issuing a discussion paper outlining the situation, the broad policy setting and the tax proposals under consideration, inviting the views of interested individuals and groups. As many as possible of the submissions received in response to this invitation should be made public. A parliamentary committee, such as the Standing Committee on Finance, Trade and Economic Affairs, could contribute to the process by considering the discussion paper, receiving submissions from the public, hearing witnesses and publishing its proceedings.

Financial Reporting and Taxation in an Inflationary Environment

For a number of years the Council has been concerned about the distortions in financial reporting and taxation caused by inflation. In the Sixteenth Annual Review we recommended that accounting bodies, such as the Canadian Institute of Chartered Accountants, expedite their efforts to develop and implement methods of financial reporting better able to reflect the effects of inflation on the corporate financial position. On October 15-16, 1981 the Council, in cooperation with the Canadian Institute of Chartered Accountants, the Canadian Manufacturers' Association, the Canadian Chamber of Commerce, the Canadian Federation of Independent Business and the Canadian Tax Foundation, sponsored a conference on inflation-induced distortions in financial reporting and taxation, the proceedings of which were published recently.

In December 1981 the Canadian Institute of Chartered Accountants issued *Reporting the Effects of Changing Prices*, proposing new reporting requirements. These requirements, which apply to large publicly held enterprises, call for supplementary information in annual reports on the effects of changing prices. They allow considerable scope for flexibility and encourage experimentation. We welcome these new disclosures and will be following their implementation with keen interest.

Now that the accounting profession has established new standards for financial reporting in an inflationary environment, the time is drawing near when the government will have to address seriously the implications of the new standards for business taxation. Accordingly,

13 We reiterate our recommendation in the Sixteenth Annual Review that business tax legislation be reexamined by governments with a view to ensuring that taxes are based on real rather than nominal profits, and that existing business tax incentives be reviewed in the light of such a change.

Inflation-induced distortions in relative tax burdens among firms and industries are substantial. They stem from the differences between historic and current cost depreciation and inventory accounting and from differences in the impact of inflation on outstanding debt. These distortions can cause a significant misallocation of investment resources and can depress productivity growth. This is a serious problem that demands a major reform in taxation.

*Indexing**

The Council has long supported the indexation of the personal income tax. Indexation prevents the erosion by inflation of exemptions, deductions and tax brackets. This eliminates the main source of increases in effective tax rates caused by inflation. It requires Parliament to legislate tax increases and exercises a healthy restraint over the expansion of government spending. The Council has also, in its report *One in Three: Pensions for Canadians to 2030*, lent its support to protection of the living standards of Canada's older citizens through indexation of Old Age Security and the Guaranteed Income Supplement to the consumer price index (though suggesting that discretionary increases in benefits be concentrated in the latter program).

Although we can appreciate the government's desire to ensure that taxpayers and the recipients of some transfer programs share the burden of income restraint, it was with mixed feelings that we greeted the Minister of Finance's announcement in the June 28, 1982 budget that the indexation of the personal income tax and major transfers would be limited to 6 per cent in 1983 and 5 per cent in 1984. In fact,

14 We urge that the indexation to the consumer price index of the personal income tax and transfer programs be resumed on schedule and that no further modifications to indexing be made.

Personal Income Tax and Inflation

Indexation of the personal income tax protects taxpayers from increases in taxes resulting from the interaction of inflation and a progressive system of exemptions and rate brackets. But this is not the only way inflation affects personal income taxation. The same issues that arise as a result of inflation in the taxation of business income also arise in the taxation of personal investment income. Individuals are taxed on the income they earn as a result of the inflation premium in nominal interest rates, which is really just a repayment of capital. Individuals are taxed on capital gains that stem entirely from inflation and involve no real increase in values.

The government recognizes these problems and has taken the initiative by issuing along with the June 28, 1982 budget a paper for consultation, *Inflation and the Taxation of Personal Investment Income*, outlining a specific set of proposals. These are for a new form of term deposit that would not be taxed on that part of interest reflecting the rate of inflation, and for a Registered Shareholder Investment Plan that would shield from taxation that part of capital gains reflecting inflation. These proposals will be examined by a committee that will advise the Minister before September 30 on their feasibility. In arriving at its ultimate recommendation, the committee will have to examine many complicated issues.

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* Mr. Lortie, Chairman of the Advisory Committee on Inflation and the Taxation of Personal Investment Income, abstains from this Section as it relates to issues which are under consideration by the Committee.

Structural Policies

General Observations

From the discussion in earlier chapters it is clear that problems of a long-term structural nature are at the root of many of Canada's current economic difficulties. If we are to improve on Canada's recent dismal record of productivity growth (as described in Chapter 1) and if we are to reduce the structural rigidities that have so exacerbated the fight against inflation (as indicated in Chapter 3), the government must move beyond stabilization policies and institute some fundamental reforms in a number of its medium-term policies.

In difficult economic times, the emphasis is generally on short-term remedies. Not only are structural problems shoved aside, they are frequently intensified as a result of policies designed to shield particular groups from the worst effects of the downturn. As in the past, the current decline has led to demands for the introduction of various protective regulations and trade restrictions. It is important that in responding to these demands, the government not lose sight of its longer-term goals. While it may be desirable to provide short-term relief to particular segments of society, such action can lead to major distortions and inequities over the longer term. An understanding of the nature of Canada's current economic difficulties would, we believe, take us in a policy direction quite different from that being advocated by those seeking special privileges and protections. It would lead to renewed efforts to promote needed structural adjustment and to eliminate the rigidities that have become such a prominent and disturbing feature of the economic landscape.

Structural reform is a broad and complex issue, and it is not our intention in this Review to set out anything resembling a medium-term policy agenda. The research the Council has undertaken on structural issues in recent years, however, does indicate some important directions for reform. At the general level the Council's work suggests the need for more thorough assessments of the rationale for government intervention and the effects of any resulting impediment to the free operation of markets. Government intervention may be necessary because of the inadequacy of market controls, or because market results do not adequately reflect the broad public interest. Our work suggests, however, that intervention often occurs without sufficient attention to its overall effects and its broad costs and benefits. There are cases where major deficiencies in the market have been left unattended; there are other instances where government rules and constraints have remained intact although the rationale for their adoption has long ago disappeared. The result is that rather than contributing to economic growth, government policies frequently foster inefficiency and reduce the dynamism of the economy and its responsiveness to market signals.

Regulation

The Council's report, *Reforming Regulation*, documents these concerns as they apply to the impact of government regulation on particular industries and sectors of the economy. In the case of airline regulation, our main focus was on the price and entry controls that limit competition and reduce the ability of the industry to respond to consumer preferences through new and different combinations of air fares and air service. In the area of trucking, the Council was concerned about the significant constraints on the operating freedom of motor carriers resulting from provincial licensing requirements, and the impact of these on the costs of providing for-hire trucking services. In agriculture, we took issue with the power of supply management boards to control the production and price of eggs, turkeys, chickens, tobacco and milk; our research indicates that in each of these areas supply management has led to higher prices and a less efficient pattern of production. The report also indicates how occupational regulation – including self-regulation as practiced by a number of the professions – can involve some undesirable and costly restrictions on the operation of market forces. The Council's research suggests, more generally, that a major effort at reform, involving the phased withdrawal of the competitive restrictions in industries subject to direct regulation (these industries accounting for about 30 per cent of gross domestic product), would result in very substantial real gains for the Canadian economy.[1]

Labour Markets

The need for a more searching examination of where and how governments should intervene in the market surfaced once again as a broad theme in the Council's recent examination of Canadian labour markets. In the report, *In Short Supply: Jobs and Skills in the 1980s*, we note that government does have a legitimate role in helping to correct and overcome the effect of failures within Canada's labour markets. There is a need, in particular, for programs to fill skill shortages and to relieve existing and anticipated market bottlenecks. But while the federal government has engaged in employment training in a big way – expenditures totaled over $800 million in fiscal 1980/81 – this has not prevented the emergence of significant skill shortages. Government training programs should be directed toward the kind of imbalances in the labour market which the private sector on its own is ill equipped to correct. This was not the thrust of the training programs introduced under the Adult Occupational Training Act. The problem was partly a lack of information about manpower needs and training possibilities in private industry. Difficulties also arose because of the attempt to use federal training to relieve hardship in poorer regions of the country. As a result, in some regions individuals were trained for jobs that were not there, while in other regions the skill needs resulting from strong growth were left unmet. The need for a new approach in this area has apparently been recognized by the federal government, which recently announced major changes under a proposed National Training Plan.

Technological Change and Productivity Growth

Research is now under way at the Council on the general issue of technological change and productivity growth in Canada. Here again there is a role for governments to play, but the preliminary results of our research suggest that existing federal programs may not be correctly targeted on the major gaps in the market. Research carried out for the Council, for example, raises some questions about the federal policy aimed at increasing R & D to a specified proportion of GNP by 1985. This policy is based on comparisons between R & D expenditures in Canada and elsewhere. It is also premised on an assumed close relationship between research spending and innovation. Our research suggests that while grants or tax concessions to stimulate R & D would be beneficial in some industries, they would be ineffective in other industries and actually harmful in still others. A broader and more complete perspective on the process of technical change is needed. Such a perspective would emphasize the possibilities of enhancing technical change through policies aimed at speeding the importation of new technologies and accelerating the diffusion of new innovations to potential users.

Economic Development Policies

Our discussion of economic development in Chapter 4 reflects the Council's concern that in framing its industrial policies – as in designing programs in the other areas mentioned above – the government is not giving adequate attention to the role of market forces in economic development. The emphasis on resource-related major projects and the manufacturing and service industries capable of supplying the needs of these projects is good insofar as it constitutes a recognition of our comparative advantage. However, if it is taken further it could result in a process of development biased too heavily in favour of the resource and resource-related sectors. This could lead to unbalanced growth and leave the economy more vulnerable to the sharp fluctuations in demand that beset this sector.

On the positive side, the Council believes that the general framework stressing industrial development, resource development, transportation, export promotion and human resources is sound. The Economic Council also commends the way in which priorities for economic development are to be translated into the operations of the Policy and Expenditure Management System. This should help to ensure that economic development policies are pursued in a more systematic and consistent manner, with a greater orientation to the medium term. There will still, of course, be a need for federal-provincial coordination of economic development policies.

The Council remains convinced, however, that it is very important not to underrate the prospects of a broad range of manufacturing and processing activities unrelated to resource development. An impression exists that many segments of our manufacturing and service sectors are uncompetitive at home and abroad, and that investment in these sectors is less productive. To some extent, this impression has been created by statistics showing that Canada has experienced a large and growing balance of trade deficit in so-called end products. These statistics are somewhat misleading, however, because they fail to capture the full measure of manufacturing and semimanufacturing activities in this country.

The Council believes there are a good many success stories in both manufacturing and service industries, although some of these industries are clearly becoming less competitive. Moreover, the investment needs related to these success stories are in many instances substantial, and in total could be an important element in Canada's investment outlook. Many of these successes are the result of the growing world-scale marketing of specialized products developed by indigenous Canadian firms and by Canadian subsidiaries of foreign multinational enterprises.

The broad question of the most efficient way to allocate resources in the economy is central to any consideration of how much reliance there should be on major projects in economic development policies.

When government intervention through grants, tax incentives, loans, loan guarantees or direct regulation is contemplated, the benefits from the proposed actions must be calculated and compared with their costs so as to ensure that the actions are worthwhile. It is also necessary to ask if the government is trying to achieve its objective at the minimum cost and whether the most appropriate instrument is being used. This requires increased emphasis on the use of cost/benefit analysis. It would also be helpful if improvements could be made in government fiscal and accounting frameworks to ensure that government assistance is provided in a visible way. Canadian governments have increased information on the budgetary costs of alternative policy instruments and introduced additional control mechanisms over instruments that can be used as substitutes for direct government spending. The federal government's new Policy and Expenditure Management System is a case in point. This information will help the public to develop a clearer view of government actions, which in turn will make governments more conscious of the cost and efficiency of these actions.

Energy Policies

The Council considers energy issues among the most important to be faced in the medium to long term. Consequently, the Council has major studies under way on energy and on Western Canadian regional developments.

In Chapter 4 of this Review, we noted that the National Energy Program has several notable accomplishments to its credit. It established a pricing schedule that will take the domestic price of oil toward world levels. This will encourage conservation and promote supply. The NEP also set a schedule of price increases for natural gas that will provide an incentive to switch from oil to gas, a resource that we have in relative abundance. In addition, the NEP at least temporarily resolved the federal-provincial dispute over energy revenues.

On the other hand, we have reservations about many aspects of the NEP. We wonder if such a "hands on" regulatory approach to energy policy is really necessary. We are concerned that the pursuit of the objectives of oil self-sufficiency may not pay adequate attention to its costs. While we support the goal of greater Canadian ownership and control of oil and natural gas production, we wonder whether, in the short run, Canadianization has been worth the high cost it has imposed on the economy in terms of downward pressure on the Canadian dollar and higher interest rates.

The Council is still in the early stages of its own energy study so it would be premature to try to offer a comprehensive set of recommendations for energy policy. Our discussion of the overall economic environment would not be complete, however, if we did not at least consider the contribution of government initiatives in the energy area to the current mood of uncertainty in the business community. Whatever the longer-term benefits of the NEP, it has imposed a short-term cost through its influence on businessmen's perception of the riskiness of energy investment. In this light, we consider it very important that the government move to resolve the various unsettled issues in the energy area including federal-provincial arrangements for the development of offshore oil and gas. Decisions to allow larger volumes of electricity and natural gas exports could do much to improve the situation in the energy sector. A critical examination of the NEP with a view to the development of a somewhat less regulatory approach in some areas might also be helpful. More generally, we think it would be highly desirable for the government to undertake a full review of the NEP well before the federal-provincial accords come up for extension or renewal in 1986.

Conclusion

The economy is performing rather badly. It is beset by the twin problems of inflation and unemployment. Both macroeconomic and structural policies have been impeding performance. Restrictive monetary and fiscal policies have been prevented by structural rigidities from bringing down inflation as rapidly as desired and have instead resulted in depressed output and increased unemployment. The impact of a restrictive monetary policy has been especially severe, and the combination of high interest rates and reduced output has greatly weakened the financial position of most firms.

Provided the international situation is favourable and continued progress can be made against inflation, it would be desirable to ease up somewhat on the degree of restraint being imposed. We believe that reductions in interest rates to more normal levels, combined with a moderate tax cut, would help to improve economic performance significantly in the medium term. It still would not measure up to what we have come to expect, but the provision of economic advice, like politics, is the art of the possible.

An easing of the degree of monetary and fiscal restraint could help to improve macroeconomic performance. But we must do more than this – we must also attack the structural rigidities that make inflation so resistant to monetary and fiscal restraint and that undermine the macroeconomic basis of productivity in the longer run.

Structural reforms are not very high on the list of priorities during a severe recession, when there is an understandable tendency to concentrate on survival. In many instances this leads to increased demands on the government by particular groups and sectors for protection and support. At a minimum, the government must resist these demands; otherwise the economy will be encumbered with even more rigidities. This would make it still more difficult to achieve satisfactory economic performance in the future.

An advantage of easing up somewhat on the degree of restraint of monetary and fiscal policy is that it will lessen the pressure for the adoption of perverse structural policies. But we must do more than avoid such policies; we must begin the process of reform. We have noted a number of areas in which present structural policies might usefully be reviewed. We recognize, however, that a recession is not the best time for radical structural reforms. The ability of individuals and firms to adjust is much less than usual and indeed, some policy changes that would in ordinary times be quite stimulating could result in bankruptcies. Once the recovery is firmly under way we will be better able to take up the challenge of structural reform.

Comment and Dissent

Kalmen Kaplansky

There are several positive aspects about this Review. It identifies correctly the problem of unemployment as a crucial issue and responds by advocating measures which support a more expansionary fiscal policy. It suggests that tax cuts are appropriate in order to stimulate the economy; personally I would favour those tax measures designed to take into account distributive effects, thus helping those in the lower income groups. I also strongly endorse the view taken in the Review on government deficits; it rightly notes that a large federal deficit is understandable and manageable in present economic conditions. It correctly indicates that many "glib suggestions have been made about cutting government expenditure." Very few have identified the areas where such cuts ought to be made.

Despite these positive aspects, I have reservations concerning certain recommendations, as well as the total package. Some recommendations are too vague, not going far enough toward identifying specific policy measures or goals. Recommendation 8 is rather puzzling. I agree with those who argue that it is absolutely essential to bring down interest rates if we are serious about revitalizing our economy and reducing the very serious rate of unemployment. Presumably, recommendation 8 was intended to support this view, but the qualifying words of that particular paragraph would seem to make it almost meaningless. The Review does not go far enough in identifying what expansionary policies should be followed by the Bank of Canada. In a period marked by a lack of cooperation among the key players in the economy, recommendation 10 should either be more explicit or deleted. There seems to be no sharp focus in the discussion of structural policies. The Review lacks specific advice regarding the direction of the economy and economic policymaking for the medium term – a responsibility of the Council under its mandate. To overcome the current severe problems of our economy, more need be said about manpower policies and an "industrial strategy," especially for the longer term.

There are several aspects of the Review which I cannot endorse. I disagree with the rationale preceding recommendation 6; there is no strong case for increasing the domestic wellhead price of oil above 75 per cent of the international price. To the contrary, current international oil prices, especially those in the United States, support a case for lower energy prices for the Canadian consumer over at least the next two years – in keeping with the government's own proclaimed policy of restraint. This would seem appropriate given the extent to which the Review documents how much inflation is fueled by energy prices. In addition, I cannot endorse the views expressed about Canadianization or what appears to me as implied criticism of the NEP. Canadians should have more control of and participation in their own energy industry. There is no substantial evidence that these policies have damaged our economy. With Petro-Canada still only controlling about six per cent of the oil industry in Canada, there is every reason to favour keeping the pace of Canadianization at a reasonably high level. Finally, I find the section on incomes policy unsatisfactory. Some of the discussion of such policies is overly supportive of the need for wage restraint, of the effectiveness of wage controls, as well as of the federal government's current guidelines. The Council should have taken a much more neutral stance about these issues.

In conclusion, I would like to note that in the preparation of this Review the Council went a considerable way toward seeking a consensus. This is greatly appreciated.

Notes

CHAPTER 1

1 Bank of Canada, *Annual Report 1980* (Ottawa: Bank of Canada, 1981), p. 12.

2 Bank of Canada, *Annual Report 1981* (Ottawa: Bank of Canada, 1982), p. 19.

3 Gerald K. Bouey, Remarks to the Montreal Chamber of Commerce, Montreal, Quebec, December 1, 1981, p. 7.

4 Bank of Canada, *Annual Report 1981*.

CHAPTER 3

1 See especially Economic Council of Canada, *Thirteenth Annual Review: The Inflation Dilemma* (Ottawa: Supply and Services Canada, 1976).

2 D.A.L. Auld, L. Christofides, R. Swidinsky and D. A. Wilton, "The Impact of the Anti-Inflation Board on Negotiated Wage Settlements," *Canadian Journal of Economics* 12(1979); J. M. Cousineau and R. Lacroix, "L'impact de la politique canadienne de contrôle des prix et des revenus sur les ententes salariales," *Canadian Public Policy* 4(1978); P. Fortin and K. Newton, "Labour Market Tightness and Wage Inflation in Canada," a paper presented at the Brookings Conference on Labour Market Tightness and Inflation, Washington, D.C., November 1980; and F. Reid, "The Effect of Controls on the Rate of Wage Change in Canada," *Canadian Journal of Economics* 12(1979).

3 The possibility that such a result could emerge in Canada is raised in Michael Parkin, "Watch Out for Falling Inflation," *The Canadian Business Review* (Autumn 1981).

4 In the post-1971 period these demand pressures show up most clearly after appropriate adjustments are made for changes in the composition of the labour force, increases in minimum wages and changes in unemployment insurance, all of which (but especially the 1971 revisions to the Unemployment Insurance Act) tended to reduce the degree of labour market slack indicated by a given unemployment rate. See F. Reid, "Unemployment and Inflation: An Assessment of Canadian Macroeconomic Policy," *Canadian Public Policy* (1980).

5 This argument is developed most rigorously in A. M. Okun, *Prices and Quantities: A Macroeconomic Analysis* (Washington, D.C.: The Brookings Institution, 1981).

6 On this, see J. Tobin, "Stabilization Policy Ten Years After," *Brookings Papers on Economic Activity* (1980); and R. G. Lipsey, "The Understanding and Control of Inflation: Is There a Crisis in Macro-Economics?" *Canadian Journal of Economics* 14(1981).

7 L. Christofides, R. Swidinsky and D. A. Wilton, "A Microeconomic Analysis of Spillovers Within the Canadian Wage Determination Process," *The Review of Economics and Statistics*, 62(1980); L. Christofides, R. Swidinsky and D. A. Wilton, "A Microeconomic Analysis of the Canadian Wage Determination Process," *Economica* 47(1980); and D. A. Wilton, *Wage Inflation in Canada, 1955-75*, Economic Council of Canada (Ottawa: Supply and Services Canada, 1980).

8 These results are summarized in Department of Finance, *Canada's Recent Inflation Experience*, November 1978.

9 Robert S. Gordon, "Why Stopping Inflation May Be Costly: Evidence from Fourteen Historical Episodes," National Bureau of Economic Research, Conference Paper No. 108, Cambridge, Mass., March 1981.

10 J. F. Chant and D. G. McFetridge, *The Allocative Effects of Inflation*, Anti-Inflation Board (Ottawa: Supply and Services Canada, 1979).

11 Economic Council, *The Inflation Dilemma*.

12 Keith J. Brewer, "Inflation-Induced Distortions in Financial Reporting and Taxation in the Energy and Mining Sectors," in *Peering Under the Inflationary Veil*, ed. P. Grady, Proceedings of the Conference on Inflation-Induced Distortions in Financial Reporting and Taxation, organized by the Economic Council of Canada, October 1981.

13 This would be the case if the gains from reducing inflation were to grow at a rate equal to or in excess of the appropriate discount rate. See Martin Feldstein, "The Welfare Cost of Permanent Inflation and Optimal Short-Run Economic Policy," *Journal of Political Economy* (August 1979).

14 Department of Finance, *The Tax Systems of Canada and the United States*, November 1978, p. 59.

15 *Major Canadian Projects, Major Canadian Opportunities*, A Report by the Consultative Task Force on Industrial and Regional Benefits from Major Canadian Projects, June 1981, p. 13.

16 Department of Industry, Trade and Commerce, Office of Industrial and Regional Benefits, *Major Capital Projects Inventory*, October 1981.

17 Jack Willoughby, "Time for Program Has Come, Cosgrove says – Ottawa Plans to Ease Rent Burden," *Globe and Mail*, March 7, 1981, p. 11.

18 This and related data on import penetration and export orientation are important because of what they suggest about the long-run structural changes occurring in the economy. Contrary to what some have asserted, there is no evidence that Canada is becoming "de-industrialized." This issue will be addressed more fully in a forthcoming Council document on Canadian industrial policies and productivity growth.

19 The competitiveness index calculated by the Department of Finance is a ratio of Canada's unit labour cost to a multiple weighted average of its competitors' unit labour costs. For fuller details see Department of Finance, *Economic Review*, April 1980, p. 98.

20 David Longworth, "The terms of trade: The Canadian experience in the 1970s," *Bank of Canada Review*, January 1980, pp. 13-25.

21 Longworth, "The terms of trade."

22 The significance of nontariff barriers and the limitations of the Tokyo Round negotiations in the context of Canada-U.S. trade are emphasized in a recent Senate report. See The Standing Senate Committee on Foreign Affairs, *Canada-United States Relations, Volume III: Canada's Trade Relations with the United States* (Ottawa: Supply and Services Canada, 1982).

23 See, for example, Richard I. Kirkland Jr., "Washington's Trade War of Words," *Fortune*, April 5, 1982.

24 This is based on a comparison of hourly compensation of workers in vehicle and equipment manufacturing calculated by the U.S. Department of Labor, Bureau of Labor Statistics. Hourly compensation includes all direct payments made to the worker; employer expenditures for legally required insurance programs as well as contractual and private plans; and labour costs arising from payroll or employment taxes.

CHAPTER 4

1 A number of provinces have tabled their own economic development papers, along with recent budgets, including Ontario, Quebec and Newfoundland.

2 This research has not been published. It was prepared as background to the work of the Economic Council's Technological Change, Growth and Productivity Group, which will be releasing its full report early next year.

3 Most notably in its Eighth Annual Review, *Design for Decision-Making* (Ottawa: Information Canada, 1971).

4 See Treasury Board Secretariat, *Benefit-Cost Analysis Guide* (Ottawa: Supply and Services Canada, 1976). The 10 per cent social discount rate recommended in the *Guide* was based on information in a study by G. P. Jenkins: "Capital in Canada: Its Social and Private Performance, 1965-74," Economic Council of Canada Discussion Paper 98, Ottawa, 1977. For further recent discussion of the appropriate social discount rate for Canada, see M. T. Summer, "Benefit-Cost Analysis in Canadian Practice," *Canadian Public Policy* VI, no. 2 (Spring 1980):389-93; Harry F. Campbell, "Shadow-Prices for the Economic Appraisal of Public Sector Expenditures," *Canadian Public Policy* VII, no. 3 (Summer 1981):395-98; David F. Burgess, "The Social Rate for Canada: Theory and Evidence," *Canadian Public Policy* VII, no. 3 (Summer 1981):383-94; Glenn P. Jenkins, "Discount Rates for Economic Appraisal of Public Sector Expenditures," *Canadian Public Policy* VI, no. 3 (Summer 1980):549-55; Glenn P. Jenkins, "The Public Sector Discount Rate for Canada: Some Further Observations," *Canadian Public Policy* VII, no. 3 (Summer 1981):399-407.

5 Comparison of the "real" social discount rate of 7-10 per cent before taxes but net of inflation with the 20 per cent "hurdle" rate of return after taxes but including inflation, reportedly sought by the members of the consortium, requires that the two rates be put on a comparable basis. In some projections of inflation done by oil companies and made available to the Council, the result was an average 7 per cent per year through the early years of the next century. The real rate of return, which is consistent with the 20 per cent nominal rate of return required, is thus about 13 per cent. This is significantly higher than the real social rate of return after taxes of at most 5-6 per cent.

6 See R. Schultz, F. Swedlove and K. Swinton, "The Cabinet as a Regulatory Body: The Case of the Foreign Investment Review Act," Economic Council of Canada, Regulation Reference Working Paper 6, Ottawa, 1980.

CHAPTER 5

1 N. E. Cameron, "Interest Rates and Inflation," *Western Economic Review*, I, no. 2 (1982), pp. 4-16.

2 U.S. Congressional Budget Office, *The Prospects for Economic Recovery* (Washington: U.S. Government Printing Office, 1982), p. 59.

3 U.S. Office of Management and the Budget, *Current Budget Estimates*, April 1982, p. 2.

4 Department of Finance, Press Release, July 29, 1981.

5 Bank of Montreal, "Canadian Corporate Takeovers: Some Economic Impacts," July 28, 1981, pp. 40-42.

6 Minister of Energy, Mines and Resources, *National Energy Program: Update 1982* (Ottawa: Supply and Services Canada, 1982), pp. 47-48.

7 *Bank of Canada Review* (May 1982), pp. 13-14.

8 This point was discussed in William Mackness, "Capital Outflows and the Exchange Rate: The Strains and Risks of Financing the New Nationalism," Pitfield MacKay Ross Limited, Toronto, July 1981, pp. 6-7.

9 A more technical discussion of the transition problem can be found in Charles Freedman, "Monetary Aggregates as Targets: Some Theoretical Aspects," Bank of Canada Technical Report 27, July 1981, pp. 32-34.

10 This is based on the equilibrium coefficients of a demand-for-money equation estimated by Stephen Poloz, "Working Papers on the Demand for Money,"

University of Western Ontario, London, Ontario, March 1981, mimeo.

11 Laurie Landy, "Financial Innovation in Canada," *Federal Reserve Bank of New York Quarterly Review*, V, no. 3 (Autumn 1980):7.

12 The discussion of those factors that tend to shift the demand for M1 is based on that contained in Bank of Canada, *Annual Report I981* (Ottawa: Bank of Canada, 1982), pp. 29-32.

13 Bank of Canada, *Weekly Financial Statistics*, March 18, 1982.

14 Thomas J. Courchene, *Money, Inflation, and the Bank of Canada, vol. II* (Montreal: C.D. Howe Institute, 1981), pp. 308-9.

15 The Bank of Canada decided to make use of M1 because of the fairly stable and systematic relationship that has been observed between M1 and nominal income growth and because it can be more readily steered by varying short-term interest rates than broader aggregates (see Bank of Canada, *Annual Report 1981*, p. 29).

16 James Tobin, speech given at the Conference Board's Financial Outlook Conference, New York, February 24-25, 1982.

17 Empirical studies of the impact of the Anti-Inflation Program have found that it did exert a restraining influence on wages: see Jean-Michel Cousineau and Robert Lacroix, "L'impact de la politique canadienne des prix et des revenus sur les ententes salariales," *Canadian Public Policy* 4(Fall 1978):88-100; Louis N. Christofides and David A. Wilton, *Wage Controls in Canada (1975:3-1978:2): A Study of Their Impact on Negotiated Base Wage Rates* (Ottawa: Anti-Inflation Board, I979); and Frank Reid, "The Effects of Controls on the Rate of Wage Change in Canada," *Canadian Journal of Economics* 12 (May 1979):214-27. Christofides and Wilton concluded in their study (pp. 88-69) that the cumulative impact of the AIB on private sector wages was 7.2 per cent after four years.

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